COMPREHENSIVE SITE INVESTIGATION
FOR
JOHNS MANVILLE COMPANY SITE
NASHUA, NEW HAMPSHIRE
PHASE 1
3 - 11 MAY 1995

Prepared For:

U.S. Environmental Protection Agency
Emergency Planning and Response Branch
60 Westview Street
Lexington, MA 02173

CONTRACT NO. 68-WO-0036

TDD NO. 01-9505-01

PCS NO. 1321

DC NO. 02644

Prepared By:

ROY F. WESTON, INC.
Technical Assistance Team
Region I

June 1995

TABLE OF CONTENTS

LIST OF FIGURES

PAGE

LIST OF APPENDICES

1.0 OBJECTIVE

The objective of this comprehensive site investigation was to evaluate the Johns Manville Company site (the site) for the presence of hazardous substances as defined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended, and to evaluate the present and existing threats posed to human health, welfare and the environment by those substances.

The site was referred to the United States Environmental Protection Agency (EPA) Emergency Planning and Response Branch (EPRB) by the New Hampshire Department of Environmental Services (NH DES) on 26 April 1995.

2.0 SITE LOCATION AND HISTORY

The former Johns Manville Company facility (the facility) is located at 40 Bridge Street and 10 Sanders Street in Nashua, Hillsborough County, New Hampshire (see Figure 1 - Site Location Map). The site is bordered to the North by the Nashua River, to the East by further industrial properties followed by the Merrimack River, to the south by Bridge Street, and is abutted to the West by Boston and Maine railroad tracks. The site is approximately 4 acres in size and consists primarily of the two buildings (see Figure 2 - Site Diagram).

According to town records, the site was originally occupied by the Whitney Soapstone Works in the late 1800s. The Johns Manville Company (the company) began operations at the site in 1900. The company combined asbestos fibers with cement and produced 4 foot by 8 foot sheets of insulating materials, ranging from 1/8 inch to 4 inches thick. In addition, the company also produced several asbestos cement products used for industrial and construction insulation. The original building was expanded six times from 1900 to 1941 and the company also built an additional building on the adjacent lot at 10 Sanders Street in 1910 in order to meet production requirements.

The facility also produced waste materials as a result of its production process consisting of quality rejects, sludge and baghouse dust materials and other sheet material. The material was stored by the company and distributed to surrounding property owners as free fill material. The fill was used at numerous properties in surrounding communities over a number of decades. Conservative estimates place the total volume of fill material used in excess of 400,000 tons. The free fill policy was terminated in the early 1970s as a result of federal regulations concerning the use of asbestos-containing products.

In December 1985, the facility ceased production of asbestos-containing products, eliminating asbestos as a raw material for its products. The new non-asbestos based products were produced at the site using the same equipment and production process.

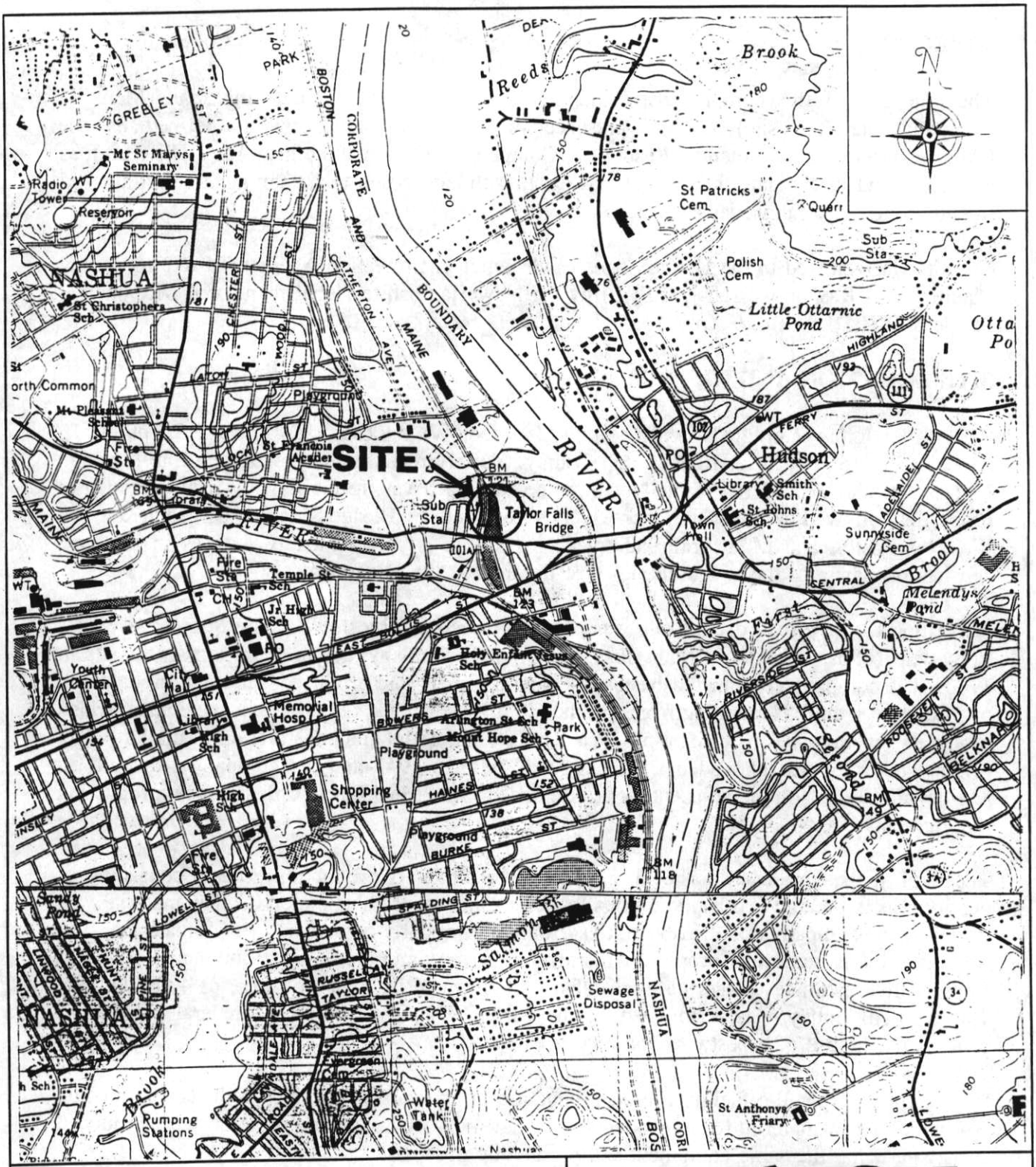


FIGURE 1

SCALE 1:24,000

SITE LOCATION MAP
JOHNS MANVILLE PLANT SITE
NASHUA, NEW HAMPSHIRE

SOURCE: USGS TOPOGRAPHICAL MAP FOR NASHUA NORTH AND SOUTH, NH, 1968 & 1965. 7.5 MINUTE SERIES, PHOTOREVISED 1985, 1979.

WESTON®
MANAGERS DESIGNERS/CONSULTANTS
REGION I TECHNICAL ASSISTANCE TEAM

DRAWN BY	DATE	PCS #
S. AMIRAULT	5/95	01-9505-01
APPROVED BY	DATE	TDD #
	5/95	1321

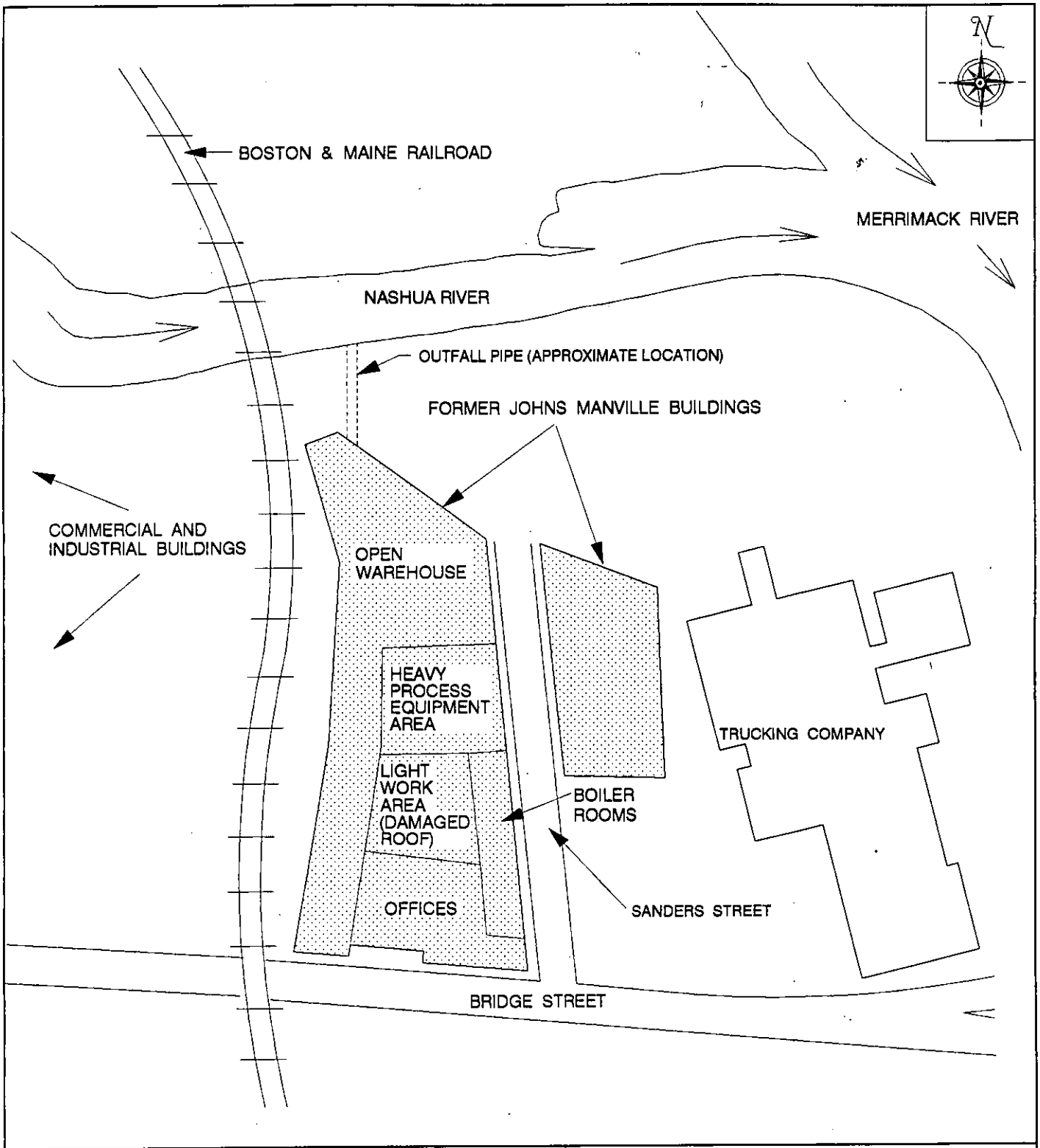


FIGURE 2

NOT TO SCALE

SITE DIAGRAM
JOHNS MANVILLE PLANT SITE
NASHUA, NEW HAMPSHIRE

FIGURE DEVELOPED FROM AN AERIAL PHOTOGRAPH NOT DATED, PROVIDED BY THE CITY OF NASHUA.

WESTON® MANAGERS DESIGNERS/CONSULTANTS
REGION I TECHNICAL ASSISTANCE TEAM

DRAWN BY	DATE	PCS #
S. AMIRAULT	05/95	1321
APPROVED BY	DATE	TDD #
	6/95	01-9505-01

During the mid 1980's, the Johns Manville Corporation, beset by lawsuits seeking cost recovery for cleanup and removal of asbestos products at site throughout the country, sought protection in bankruptcy court. In December 1987, the Nashua plant was sold to the Tamposi Family Investment Properties of Nashua, New Hampshire. Additional properties owned by Johns Manville, at Belnap Street, across Bridge Street from the site and adjacent property next to Boston and Maine Railroad property, were also included in this transaction. The deed from this transaction, and all subsequent transactions regarding the site properties states that the site building contains asbestos and asbestos materials. The plant and its equipment was leased to BNZ Materials, Inc. (BNZ), who continued to produce non-asbestos insulating products at the site until June of 1990. At that time, the manufacturing facility was shut down and manufacturing equipment was acquired and removed from the site buildings by BNZ. The site buildings have not been used for any manufacturing activities since this time. Subsequently, property taxes for the site were not paid to the City of Nashua (the City) and the building conditions began to deteriorate due to lack of maintenance.

During 1992, the site buildings at 40 Bridge Street and 10 Sanders Street were sold twice, first in May by the Tamposi Family Investment Properties to Mr. William P. Martin Jr. of Hudson, New Hampshire, and then from Mr. Martin to Mr. Steven Draper of Winthrop Massachusetts. According to property deeds, the delinquent real estate taxes and knowledge of asbestos content in the site buildings were terms of both transactions.

Since the ownership of the site by Mr. Draper, the City concerns regarding the safety of the site has increased. Property taxes have not been paid, and the sprinkler systems in both buildings no longer function. Mr. Draper and his agents have removed some of the abandoned equipment and sold it for salvage. Included in this salvage operation was the removal of four of the seven large board impregnating vessels from the 40 Bridge Street building. Large amounts of asbestos insulating materials used to insulate these vessels has become exposed and still remains in the impregnating tank room. These salvage operations and the continued deterioration of the site buildings has increased the City concerns regarding the regional safety in the event of a fire at the building. The City obtained several court orders in an attempt to force Mr. Draper to address their concerns regarding building and site conditions, all of which were ignored.

On 2 February 1995, the site was sold by Mr. Draper to Mr. Joseph O'Murphy of Woburn, Massachusetts, an associate of Mr. Draper. Mr O'Murphy has also continued to ignore the City's court orders addressing safety concerns at the site.

3.0 SITE BACKGROUND

The site was initially referred to EPA on 24 January 1994 by the City of Nashua. On 3 February 1995, EPA conducted a Removal Program preliminary assessment/site investigation (PA/SI) at the site. In addition to friable asbestos through out the buildings, several hundred containers of paints, thinners and solvents, some with flammable labels, leaking tanks of fuel oil and a leaking electrical capacitor were also observed in the site buildings. At a subsequent meeting at Nashua City Hall, the Nashua Fire Department (NFD) indicated their concerns that the site buildings pose a significant fire hazard, as well as their concerns regarding regional safety in the event of a fire and the potential for on-site asbestos migrating off site.

On 6 July 1994, EPA conducted a second PA/SI of the 37 Bridge Street site, located across the street from the former facility. This property was owned by Bridge Street Realty Trust Company and had been purchased along with the Manville property in 1987. The property consisted of an empty commercial lot which contained two abandoned box trucks. The box trucks contained approximately 1000 1-gallon to 5-gallon pails containing paints and coatings, as well as 50 55-gallon drums containing unknown solvents. These materials were stored at the 37 Bridge Street site by Mr. Draper, who at that time was the owner of the former Manville facility site. Due to the risk of fire or release, a removal action was deemed appropriate and an Action Memorandum was issued and approved by the EPA Regional Administrator on 24 October 1994. On 19 - 20 December 1994, personnel from the Region 1 Emergency Response Cleanup Services (ERCS) contractor OHM Remediation Services (OHM) removed and inventoried all of the containers from the two box trucks, as well as performed hazard categorization (HAZCAT) analysis on all of the containers for disposal purposes. All containers were removed from the 37 Bridge street site by disposal vendors on 28 February and 1 and 3 March 1995.

In October of 1994, the City hired a structural engineer, John R. Jacobson and Associates, to inspect the structural integrity of the two site buildings at 40 Bridge Street and 10 Sanders Street. As a result of the inspection, both site buildings were condemned by the City. As a result of the buildings being condemned, and in response to the continued vandalization taking place at the site, the City installed a chain-link fence around the entire perimeter of the site in order to restrict access to the site buildings.

On 28 February 1995, the City submitted an application to the EPA Office of Solid Waste and Emergency Response (OSWER) for grant funding under the Brownsfields Pilot Project initiative in an attempt to secure funding to redevelop the site.

On 26 April 1995, the site at 40 Bridge Street site was referred to EPA by NH DES to investigate leaking transformers and capacitors at the site, as well as to identify any additional hazardous materials located within the site buildings. The following section details activities conducted at the 40 Bridge Street site during the site evaluation.

4.0 NARRATIVE CHRONOLOGY

Wednesday, 3 May, 1995

EPA On-Scene Coordinator (OSC) Paul Groulx and Roy F. Weston Inc., Technical Assistance Team (TAT) member Stephen Amirault traveled to the 40 Bridge Street and 10 Sanders Street properties to conduct a Removal Program site evaluation.

Upon arrival at the site, OSC Groulx and TAT member Amirault met with Deputy Fire Chief Michael Buxton of the NFD and Robert White of the NH DES. Deputy Chief Buxton reviewed actions that had been taken at the site to date and additional background information, including the City condemning the building and erecting the perimeter fence in 1994, as well the ownership changes in February 1995 from Mr. Draper to Mr. O'Murphy.

After discussing the site background, all parties conducted a tour of the site grounds and building exteriors. The walls of the building at 10 Sanders Street were visibly sagging and numerous windows along the western side of the 40 Bridge Street building were broken. At the rear of the 40 Bridge Street building, facing the Nashua River, a pile of debris approximately 6 feet high was observed. Adjacent to this refuse pile, seven empty 55-gallon drums and one 55-gallon drum with unknown contents were observed.

Two electrical transformers were also inspected during the site walk-through. One transformer was located outside of the 40 Bridge Street building. The transformer appeared to be leaking oil from a bottom valve onto its concrete pad. OSC Groulx recorded nameplate information from the transformer. A second transformer and four capacitors were located outside of the building at 41 Bridge Street, across Bridge Street from the site. This building is owned by Bridge Street Realty Trust, a former owner of the Johns Manville site. This second transformer and capacitors were previously disconnected and are currently being stored. Both transformers had warning signs for PCBs posted. NH DES representative White stated that he would further investigate the status of these components through the owner.

In the rear of the property, adjacent to the Nashua River, an outfall pipe was observed. According to the NFD, the outfall formerly discharged from the facility to the river. The pipe has been sealed and no longer discharges into the river. In the river bank, adjacent to the outfall pipe, possible asbestos-containing material (ACM) was observed.

Upon completion of the perimeter tour, all parties donned level C personal protective equipment (PPE) as indicated in the site Health and Safety Plan (see Appendix A) and conducted a walk-through of the site buildings. Both buildings appeared to contain friable asbestos. Inside the 10 Sanders Street building, 15 5-gallon pails containing paints, nine of which had flammable labels, were observed. In addition, a bank of four capacitors and three transformers were located on an above-floor platform. OSC Groulx inspected the capacitors. The building also contains process equipment used by the former facility, including four large board impregnating vessels, two ovens, a small air compressor, and two closed tanks connected to process piping. Suspected ACM was observed throughout the building, including above and around the impregnating vessels, and along steam piping.

The parties then proceeded to the main site building, located at 40 Bridge Street. Numerous potential hazardous materials were observed during the walk-through including the following: approximately 300 small (1- to 5-gallon) containers of paint, thinners, varnishes and epoxy, 30 additional 5-gallon pails of cleaning compounds, antifreeze, and resins, several 55-gallon drums containing unknown liquids, as well as several containers of oil. In addition, spilled oil was observed on the floor in the former boiler room area. In the former board impregnating room four of the seven large impregnating vessels had been removed for salvage by the former owner. This salvage operation exposed large quantities of suspected ACM used to insulate the vessels which remain among the debris of the tank removal. Suspected ACM was also observed in insulation on top of and around the five impregnating ovens. In addition, five underground tanks, three 5000-gallon containing unknown product and two 10,000-gallon containing fuel oil, were observed in the impregnating room and inspected by OSC Groulx. The roof in this area of the building was also observed to be leaking, further dissipating the ACM.

Within two smaller rooms, near two large hydraulic presses used by the former facility, numerous plastic bags containing suspected ACM and broken scrap pieces of transite board were observed. Adjacent to the two large hydraulic presses, there were two small capacitors leaking oil onto the floor. In addition, several process tanks were being stored in the building by the former owner.

In the basement of the building, underneath the two hydraulic presses, pools of hydraulic fluid were observed on the floor. Also in the basement, the floors, walls and piping was coated with suspected ACM process sludge from former operations.

On the roof of the building, inside and around the metal structures used in former dust baghouse operations, suspected ACM materials were observed. These structures are deteriorating and their contents are becoming exposed to outside weather conditions. In addition, numerous windows on the western side of the building are broken and the roof of the building leaks in several locations, further releasing ACM from the building to the surrounding environment.

It should be noted that, upon arriving at the site, OSC Groulx and Deputy Chief Buxton observed a truck departing the site. During the walk-through, the fence in the rear of the property was discovered to have been vandalized and salvaging tools were observed in the building, indicating that salvage operations of the contents of the building may still be ongoing.

Wednesday, 10 May 1995

OSC Groulx and TAT members Amirault and Edward Coffey returned to the site to continue the site evaluation. OSC Groulx and TAT members Amirault and Coffey inventoried the contents of all potential hazardous materials inside both site buildings and indicated their locations on a building floor plan. The complete inventory list is included in Appendix B.

Thursday, 11 May 1995

TAT members Amirault and Coffey collected 21 random samples for asbestos analysis from sample locations inside and outside both buildings selected by OSC Groulx. The locations included the bag hopper structures on the roof of the 40 Bridge Street building and a location on the bank of the Nashua River, adjacent to the former plant outfall pipe. Additional samples were also collected from containers and from the floor inside the 40 Bridge Street building and submitted for polychlorinated biphenyls (PCB), volatile organic compounds (VOCs) and oil identification analyses. All sampling was conducted per the site sampling quality assurance/quality control (QA/QC) plan (see Appendix C). All samples were submitted to the EPA New England Region Laboratory (NERL) for analysis by TAT member Amirault on Friday, 12 May 1995.

5.0 PRELIMINARY FINDINGS

Analytical results from samples submitted for asbestos analysis indicate asbestos concentrations ranging from 0 to 80 percent (see Appendix D).

Analytical results from samples submitted for PCB analysis indicate results from 300,000 to 730,000 parts per million (ppm) in the samples collected from the leaking capacitor and transformer (see Appendix E).

Analytical results from samples submitted for oil identification indicate one match from one sample submitted (see Appendix F).

Analytical results from samples submitted for VOC analysis are are listed in Appendix G.

6.0 REFERENCES

City of Nashua, New Hampshire, Community Development Division. February 28, 1995. Application for Funding Under the Brownsfields Pilot Project.

Jacobsen, John R. October 10, 1994. *Structural Inspection and Assesment of the Johns Manville Facility, Nashua, New Hampshire*, prepared for the City of Nashua, New Hampshire.

Roy F. Weston, Inc. March 1994. *Removal Program Preliminary Assessment/Site Investigation for the Johns Manville Company Site, 3 February 1994.* Technical Assistance Team, Burlington, MA.

Roy F. Weston, Inc. May 1995. Memorandum to the Johns Manville Company Site File, Technical Assistance Team, Burlington, MA.

U.S. Geological Survey, 1968. Nashua North, New Hampshire Quadrangle. 7.5 minute series (Topographical) Photorevised 1985.

U.S. Geological Survey, 1965. Nashua South, New Hampshire Quadrangle. 7.5 minute series (Topographical) Photorevised 1979.

ATTACHMENTS

APPENDIX A

Heath and Safety Plan

ORIGINAL

ROY F. WESTON, INC.
TECHNICAL ASSISTANCE TEAM
REGION I
HEALTH AND SAFETY PLAN
EMERGENCY RESPONSE/SITE INVESTIGATION

TDD No. ~~TAA~~ 01-9505-01 **PCS No.** ~~0[illegible]~~ 1821 **Site Name:** JOHNS MANVILLE
Site Address: Street No. ~~40 46 50~~ 74 BRIDGE STREET, 10 SANDERS STREET
City NASHUA
County/State HILLSBOROUGH / N. H.
Site Contact/Phone No.: MICHEAL BUXTON, ASSISTANT FIRE CHIEF / 603-594-3652

Directions to Site: (Att. Map) RT 95 SOUTH TO RT. 3 NORTH TO NH EXIT 4. RIGHT ON EAST DUNSTABLE TO INTERSECTION AT MAIN STREET. TAKE LEFT (NORTH) ON MAIN STREET, THEN RIGHT ONTO EAST HOLLIS RD. FOLLOW FOR APPROX. 1 MILE, THEN LEFT ON BRIDGE STREET. SITE IS ON LEFT

Historical/Current Site Information: SITE IS AN ABANDONED MANUFACTURING FACILITY, FORMERLY PRODUCING ASBESTOS INSULATING MATERIALS.

Incident Type:
( ) Air Release -
( ) Spill -
( ) Fire -
(✓) HW Site - INACTIVE BUILDING CONTAINING ACM

Location Class: (✓) Industrial ( ) Commercial ( ) Urban/Residential ( ) Rural

USEPA Contact: PAUL GROULX **Date of Initial Site Activities:** 5/3/95
Original HASP: YES ✓ **Modification Number:** 1 (5/8/95)
Lead TAT: S. AMIRAULT **Site Health & Safety Coordinator:** S. AMIRAULT

Response Activities/Duration (fill in as applicable)

		Duration
Emergency Response:	( ) Perimeter Recon.	NA
	( ) Site Entry	NA
	( ) Visual Documentation:	NA
	( ) Multi-media Sampling:	NA
	( ) Decontamination:	NA
Assessment:	(✓) Perimeter Recon.	1 HR
	(✓) Site Entry	2 HRS
	(✓) Visual Documentation:	1 HR
	( ) Multi-media Sampling:	NA
	(✓) Decontamination:	0.5 HR

Physical Safety Hazards to Personnel

( ) Heat ( ) Cold ( ) Precipitation ( ) Confined Space ( ) Terrain
( ) Walking/Working Surfaces ( ) Fire & Explosion ( ) Oxygen Deficiency
( ) Underground Utilities ( ) Overhead Utilities ( ) Heavy Equipment
( ) Unknowns in Drums, Tanks, Containers ( ) Ponds, Lagoons, Impoundments
( ) Rivers, Streams ( ) Pressurized Containers, Systems ( ) Noise
(✓) Illumination ( ) Nonionizing ( ) Ionizing Radiation

Biological Hazards to Personnel

( ) Infectious/Medical/Hospital Waste ( ) Non-domesticated Animals
( ) Insects ( ) Poisonous Plants/Vegetation ( ) Raw Sewage

Training Requirements

(✓) 40 Hour General Site Worker Course with three days supervised experience.
( ) 24 Hour Course for limited, specific tasks with one day supervised experience.
( ) 24 Hour Course for Level D Site with one day supervised experience.
(✓) 8 Hour Annual Refresher Health and Safety Training.
(✓) 8 Hour Management/Supervisor Training in addition to basic training course.
( ) Site Specific Health and Safety Training.
( ) Pre-entry training for emergency response skilled support personnel.

Medical Surveillance Requirements

(✓) Baseline initial physical examination with physician certification.
(✓) Annual medical examination with physician certification.
( ) Site Specific medical monitoring protocol (Radiation, Pesticide, PCB, Metals).
( ) Asbestos Worker medical protocol.
( ) Exempt from medical surveillance: _____
(✓) Examination required in event of chemical exposure or trauma.

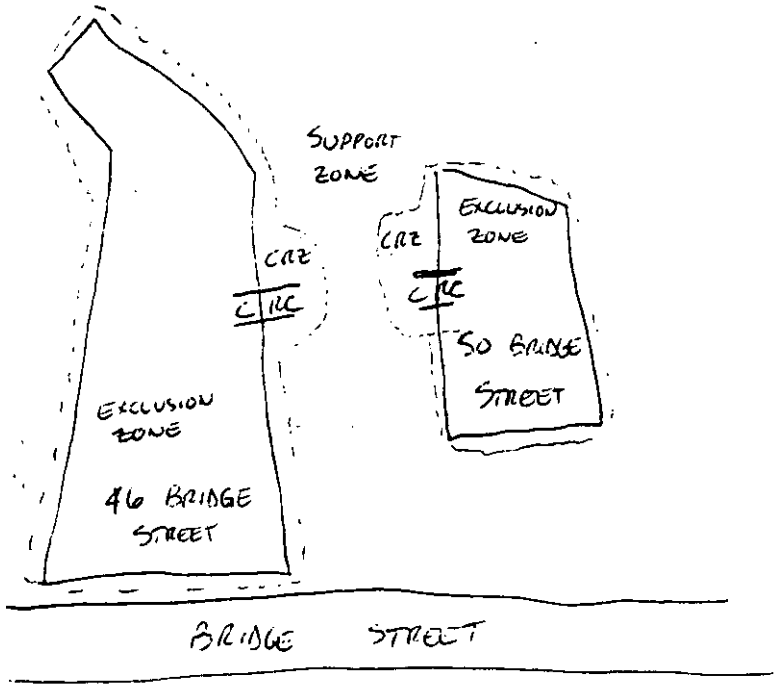
Chemical Hazards to Personnel

Physical Parameters	Chemical Contaminant	Chemical Contaminant	Chemical Contaminant	Chemical Contaminant
	ASBESTOS	PCB		
Exposure Limits IDLH Level	___ ppm ___ mg/m³ PEL ___ ppm ___ mg/m³ TLV ___ ppm ___ mg/m³ IDLH 0.10 FIBERS/cc	___ ppm 1 mg/m³ PEL ___ ppm .001 mg/m³ TLV ___ ppm 5 mg/m³ IDLH [Ca]	___ ppm ___ mg/m³ PEL ___ ppm ___ mg/m³ TLV ___ ppm ___ mg/m³ IDLH	___ ppm ___ mg/m³ PEL ___ ppm ___ mg/m³ TLV ___ ppm ___ mg/m³ IDLH
Physical Form Solid Liquid Gas Color	✓ Solid ___ Liquid ___ Gas ___ Color WHITE FIBERS	___ Solid ✓ Liquid ___ Gas ___ Color	___ Solid ___ Liquid ___ Gas ___ Color	___ Solid ___ Liquid ___ Gas ___ Color
Odor	NA	MILD HYDROCARBON ODOR		
Flash Point Flammable Limits	NA Degrees F or C ___% UEL ___% LEL	358-37 Degrees F or C NA% UEL NA % LEL	___ Degrees F or C ___% UEL ___ LEL	___ Degrees F or C ___% UEL ___ LEL
Vapor Pressure Vapor Density	NA mm/Hg NA Air = 1	.001 - .0001 mm/Hg >1 Air = 1	___ mm/Hg ___ Air = 1	___ mm/Hg ___ Air = 1
Specific Gravity	NA Water = 1	1.35-1.39 Water = 1	___ Water = 1	___ Water = 1
Solubility	NA	INSOLUBLE		
Incompatible Materials	NA	STRONG OXIDIZERS		
Route of Exposure	✓ Inh ___ Abs ___ Con ✓ Ing	✓ Inh ✓ Abs ✓ Con ✓ Ing	___ Inh ___ Abs ___ Con ___ Ing	___ Inh ___ Abs ___ Con ___ Ing
Symptoms of Acute Exposure	NA	IRRIT EYES; COUGHING, INCR SALIVATION, HEADACHE. CHRON CANC.		
First Aid Treatment	IRRIGATE EXPOSED AREAS	EYE: IRRIGATE SKIN: SOAP WASH IMMED. SEVERE: OXYGEN SUPPORT RESPIRATION, MED ATTENTION IMMEDIATELY		
Ion Potential	NA eV	NA eV	___ eV	___ eV
Instruments for Detection	___ PID w/___ Probe ___ FID ___ CGI ___ RAD ___ Det Tube ___ pH Other MICROSCOPY	___ PID w/___ Probe ___ FID ___ CGI ___ RAD ___ Det Tube ___ pH Other ELECTRON	___ PID w/ ___ Probe ___ FID ___ CGI ___ RAD ___ Det Tube ___ pH Other ___	___ PID w/ ___ Probe ___ FID ___ CGI ___ RAD ___ Det Tube ___ pH Other ___

Refer to Appendix A of this Health and Safety Plan for definitions of abbreviations and codes used in this table.

Site Control Measures

Site Map with work zones:



Decontamination Procedures

Wet Decontamination - using: Soap wash and water rinse
Dry Decontamination

Description of Site Specific Decontamination Plan:
Dry decontamination procedures to be used. A wet decontamination procedure including a soap wash and a water rinse will be available in the event it is needed.
1) Remove outer expendable PPE and dispose in plastic bag.
2) Remove respiratory protection.
3) Remove inner gloves.
4) Field wash as needed.

Adequacy of decontamination determined by: Visual inspection.

ersonal Protective Equipment

TASKS TO BE PERFORMED/AIR MONITORING REQUIRED	ANTICIPATED LEVEL OF PROTECTION	TYPE OF CHEMICAL PROTECTIVE COVERALL	INNER GLOVE OUTER GLOVE BOOT COVER	TYPE OF APR CARTRIDGE OR CANISTER
PERIMETER TOUR 1, 2, 3	D	STEEL TOED BOOTS COTTON COVERALLS	NA	NA
BUILDING WALK THROUGH 1, 2, 3	C	STEEL TOED BOOT TYVEK	SURGICAL INNER NITRILE OUTER LATEX COVERS	PAPR W/ GMC-H

Frequency and Types of Air Monitoring: (✓) **Continuous** ( ) **Routine -** _____ ( ) **Periodic -** _____

DIRECT READING INSTRUMENTS	COMBUSTIBLE GAS/OXYGEN METER (1)	RADIATION SURVEY METER/PROBE (2)	PHOTOIONIZATION DETECTOR/PROBE (3) Probe: 10.2	FLAME IONIZATION DETECTOR (4)	CHEMICAL DETECTOR TUBE (5)
ID NUMBER	TAT 49	TAT #4	MICROTIP #2		
CAL. DATE	5/3/95	5/3/95	5/3/95		
TAT MEMBER	S. AMIRAULT	S. AMIRAULT	S. AMIRAULT		
ACTION LEVEL	≥ 20% LEL ≤ 19.5%, ≥23% O_2 - LEAVE	3X BACKGRND-CAUTION; 1 MR/HR-LEAVE	UNKNOWNS 0-5 UNITS: "C" 5-500: "B"	UNKNOWNS 0-5 UNITS: "C" 5-500: "B"	PEL/TLV COMPARE W/PF

Personal Protective Equipment (5/19/95)

TASKS TO BE PERFORMED/AIR MONITORING REQUIRED	ANTICIPATED LEVEL OF PROTECTION	TYPE OF CHEMICAL PROTECTIVE COVERALL	INNER GLOVE OUTER GLOVE BOOT COVER	TYPE OF APR CARTRIDGE OR CANISTER
DRUM SAMPLING *	B	SARANEX STEEL TOED BOOTS	SURGICLE INNER NITRILE OUTER LATEX GLOVES SILVER SHIELD - MID	SCBA
WIPE SAMPLING OIL & LIQUIDS SOIL / SOLIDS (ACM)	C	STEEL TOED BOOTS TYVEX	SURGICL INNER NITRILE OUTER LATEX COVERS	PAPR

Frequency and Types of Air Monitoring: (✓) **Continuous** ( ) **Routine -** _____ ( ) **Periodic -** _____

DIRECT READING INSTRUMENTS	COMBUSTIBLE GAS/OXYGEN METER (1)	RADIATION SURVEY METER/PROBE (2)	PHOTOIONIZATION DETECTOR/PROBE (3) Probe: 10.2	FLAME IONIZATION DETECTOR (4)	CHEMICAL DETECTOR TUBE (5)
ID NUMBER	TAT #1	TAT #1	MICROTIP #2		
CAL. DATE	5/19/95	5/19/95	5/19/95		
TAT MEMBER	S. AMIRAULT	S. AMIRAULT	S. AMIRAULT		
ACTION LEVEL	≥ 20% LEL ≤ 19.5%, ≥23% O_2 - LEAVE	3X BACKGRND-CAUTION; 1 MR/HR-LEAVE	UNKNOWNS 0-5 UNITS: "C" 5-500: "B"	UNKNOWNS 0-5 UNITS: "C" 5-500: "B"	PEL/TLV COMPARE W/PF

* NO DRUM SAMPLING CONDUCTED, ONLY OIL LIQUIDS AND SOIL/SOLIDS

Emergency Phone Numbers (all contacts must be notified)

Emergency Contact	Location	Phone Number	Notified
Hospital	NASHUA MEMORIAL HOSPITAL 8 PROSPECT ST. NASHUA, NH 03061	(603) 886 - 3211	5/2/95
Ambulance	TOWN	911	5/2/95
Police	PANTHER DR. NASHUA, NH.	(603) 594 - 3500	5/2/95
Fire Dept.	2 CONANT RD. NASHUA, N H.	(603) 594-3653	5/2/95

Chemical Trauma Capability? (✓) Yes ( ) No If no, closest backup: _____ Phone: _____

Directions to hospital (attach map) - Route verified by: _____ Date: __/__/____

EXIT SITE, LEFT ONTO BRIDGE STREET, THEN RIGHT ONTO HOLLIS STREET. AFTER APPROX 1 MILE, TAKE LEFT ONTO AMHERST STREET, THEN RIGHT ONTO PROSPECT STREET AND INTO HOSPITAL.

Additional Emergency Phone Contacts

Contact	Phone Number
WESTON 24 hr. Hotline	215-524-1925, 215-524-1926
WESTON Medical Emergency Service	800-229-3674 (EMR)
Chemtrec	800-424-9300
ATSDR	404-639-0615
ATF (explosives information)	800-424-9555
National Response Center	800-424-8802
National Poison Control Center	800-942-5969
Region I TAT Office	617-229-6430

HASP Prepared by: A. Amicucci / A. Amicucci Date: 5/2/95 / 5/24/95

Pre-Response/Entry Approval by: _____ Date: 05/10/95

Verbal Approval/ Modification to Original HASP by: _____ Date: 05/09/95

Final HASP to be submitted to RSO on the day following completion of activities.

Physical Description of Site and Response Activities

Size of Site: 2-3 ACRES Terrain LEVEL Weather SUNNY 65°F
Distance to Nearest: Residence 100 YDS School 1/4 MILE Hospital 1/4 MILE
Public Building 100 FT Other ____
Evacuation: ( ) Yes (✓) No By Whom: ____
Nearest Waterway: NASHUA RIVER Distance from Site: ABUTS SITE TO NORTH

Condition	Observed	Potential	None	Comments/Observations*
Surface Water Contamination			✓	
Ground Water Contamination		✓		FUEL OIL SPILL IN BUILDING MAY HAVE PENETRATE GROUND WATER
Drinking Water Contamination		✓		ADJACENT NASHUA RIVER FLOWS INTO DRINKING WATER SOURCE
Air Release		✓		POTENTIAL ACM RELEASES FROM BUILDING
Soil Contamination	✓			ACM OBSERVED ON SITE GROUNDS FROM BUILDING
Stressed Vegetation			✓	
Dead Animal Species			✓	

* Comment required for observed or potential.

Actions Taken On-Site:
Perimeter Monitoring: (✓) Yes ( ) No
Site Entry by TAT: (✓) Yes ( ) No

Tasks Conducted 5/3/95	Level of Protection/Specific PPE Used
SITE WALK THROUGH - BUILDING PERIMETER	LEVEL D - STEEL TOED BOOTS, SAFETY GLASSES COTTON COVERALLS
BUILDING WALK THROUGH	LEVEL C WITH PAPR & GMC-H, TYVEK, ~~GLOVES~~ NITRILE GLOVES, LATEX BOOTS

Physical Description of Site and Response Activities 5/10/95 - 5/11/95

Size of Site: _____ Terrain _____ Weather _____
Distance to Nearest: Residence _____ School _____ Hospital _____
Public Building _____ Other _____
Evacuation: ( ) Yes ( ) No By Whom: _____
Nearest Waterway: _____ Distance from Site: _____

SEE PREVIOUS 5/3/95 INFORMATION

Condition	Observed	Potential	None	Comments/Observations*
Surface Water Contamination				
Ground Water Contamination				
Drinking Water Contamination				
Air Release				
Soil Contamination				
Stressed Vegetation				
Dead Animal Species				

* Comment required for observed or potential.

Actions Taken On-Site:

Perimeter Monitoring: (X) Yes ( ) No
Site Entry by TAT: (X) Yes ( ) No

Tasks Conducted	Level of Protection/Specific PPE Used
BUILDING WALK THROUGH ~~ASBESTOS~~ SA INTERIOR	LEVEL ~~A~~C STEEL TOED BOOTS ~~& OTHER COVERALLS~~, TYVEK PAPER W/ GMC-H
SAMPLING - OIL/CLOUDS ACM FLOOR SCRAPINGS	LEVEL C STEEL TOED BOOTS, TYVEK PAPER W/ GMC-H

Air Monitoring Summary Log

Date: 5/3/95

Data Collected by: S. AMIRAULT

Data to be summarized by a "Range of readings, i.e., - Low to High" and/or "Average" by location.

Station/Location	CGI/O_2 Meter	Radiation Meter	PID/Probe Probe: O_2	FID/OVA	Detector Tube
BACKGROUND (OUTSIDE BUILDING)	0.0% LEL 20.9% O_2	15-20 uR/hr 50-100 CPM	0-2 PPM		
BUILDING WALK THROUGH	0.0% LEL 20.9% O_2	15-20 uR/hr 50-100 CPM	0-2 PPM		

Summary/Comments: NA

ir Monitoring Summary Log

Date: 5/10-11/95

Data Collected by: S. Amirault

ata to be summarized by a "Range of readings, i.e., - Low to High" and/or "Average" by location.

Station/Location	CGI/O_2 Meter	Radiation Meter	PID/Probe Probe: 10.2 ~~10.8~~	FID/OVA	Detector Tube
BACKGROUND 5/10/95 (OUTSIDE BUILDING)	0.0% LEL 20.8 O_2	15-20 uR/hr 50-100 CPM	0-2 PPM		
BUILDING INTERIOR 5/10/95	0.0% LEL 20.8% O_2	15-20 uR/hr 50-100 CPM	0-2 PPM		
5/11/95 BACKGROUND	0.0% LEL 20.9% O_2	15-20 uR/hr 50-100 CPM	0-2 PPM		
INTERIOR OF BUILDING	0.0% LEL 20.8% O_2		0-2 PPM		

Summary/Comments: NA

Hazardous Waste Site and Environmental Sampling Activities

Off Site: ( ) Yes (X) No
On Site: ( ) Yes (X) No

Description of types of samples and methods used to obtain samples: NA

Was laboratory notified of potential hazard level of samples? ( ) Yes ( ) No (✓) N/A

Note: The nature of the work assignment may require the use of the following procedures/programs which will be included as Attachments to this HASP as applicable: Emergency Response Plan, Confined Space Entry Procedures, Spill Containment Program.

Disclaimer: This Health and Safety Plan (HASP) was prepared for work to be conducted under the Technical Assistance Team (TAT) Contract 68-WO-0036 for Zone I. Use of this HASP by WESTON and its subcontractors is intended to fulfill the OSHA requirements found in 29 CFR 1910.120. Items not specifically covered in this HASP are included by reference to 29 CFR 1910 and 1926.

The signatures below indicate that the individuals have read and understand the Health and Safety Plan.

PRINTED NAME	SIGNATURE	AFFILIATION	DATE
STEPHEN AMIRAULT	Stephen Amirault	R.E. WESTON TAT	5/3/95
~~EMPLOYEE~~ STEPHEN AMIRAULT	Stephen Amirault	"	5/10/95
ED WHITE			5/10/95

MOD A1

	Date
Final Submission of HASP by: Stephen Amirault	5/4/95
Post Response Review by:	
Post Response Approval by:	5 MAY 95
TAT HSO Review by:	

5/12/95 (NA)

COMMENTS/FOLLOWUP

APPENDIX A

ABBREVIATIONS AND CODES FOR CHEMICAL HAZARDS TABLE

ABBREVIATIONS FOR SYMPTOMS OF ACUTE EXPOSURE

abdom - abdominal
album - albuminuria
anem - anemia
anes - anesthesia
anor - anorexia
anos - anosmia
ANS - automatic nervous system
apat - apathy
appre - apprehension
arrhy - arrhythmias
asphy - asphyxia
asth - asthma
biliru - bilirubinuria
blur - blurred
breath - breathing
bron - bronchitis
bronspas - bronchospasm
BUN - blood urea nitrogen
ca - cancer
cachexia - severe generalized weakness, emaciation
[CARC] - carcinogenic/carcinogen
card - cardiac
cere - cerebral
chol - cholinesterase
chor - chorea
cirr - cirrhosis
CNS - central nervous system
coll - collapse
conf - confusion
conj - conjunctivitis
constip - constipation
constric - constriction
convuls - convulsions
cor pulmonale - acute right heart strain or chronic right ventricular hypertrophy
corn - cornea
CVS - cardiovascular system
cyan - cyanosis
defat - defatting
deg - degeneration
dent - dental
depres - depressant/depression
derm - dermatitis
diarr - diarrhea
dil - dilated
dist - disturbance
dizz - dizziness
drow - drowsiness
dys - dysuria
dysp - dyspnea
dysart - dysarthria
ecz - eczema
emphy - emphysema
enl - enlargement
eosin - eosinophilia
epis - epistaxis
epit - epistaxis
equil - equilibrium
ery chol - erthrocyte cholinesterase
eryt - erythema
euph - euphoria
extrex - extremities
fasc - fasciculation
fib - fibrosis
fibrl - fibrillation
frost - frostbite
ftg - fatigue
fvr - fever
gasp - gasping
GI - gastrointestinal
gidd - giddiness
glau - glaucoma
glu - glucose
halu - hallucinations
head - headache
hemat - hematoma
hemato - hematoglobinuria
hemorr - hemorrhage
hep - hepatic
hyper - hyperemia
hypox - hypoxemia
ict - icterus
inco - incoordination
inflamm - inflammation
inj - injury
insom - insomnia
intox - intoxication
irrit - irritation
irrity - irritability
jaun - jaundice
kera - keratitis
kid - kidney
lab - labored
lac - lacrimation
lar - laryngeal
lass - lassitude
leucyt - leukocytosis
leuk - leukemia
leupen - leukopenia
li-head - lightheadedness
liv - liver
lo-ap - appetite
low-wgt - weight loss
lymp - lymphocytosis
mal - malaise
malnut - malnutrition
monocy - monocytosis
muc memb - mucous membrane
musc - muscle
myo - myotonia
narc - narcosis
nas - nose/nasal
nau - nausea
nec - necrosis
neph - nephritis
ner - nervousness
neur - neurologic
numb - numbness
opac - opacity
pal - pallor
palp - palpitations
para - paralysis
pares - paresthesia
paresis - incomplete loss of muscular power; weakness of a limb
parox - paroxysm
perf - perforation
peri neur - peripheral neuritis
periorb - periorbital
phar - pharyngeal
photo - photophobia
pig - pigmentation
plas - plasma
pleur - pleurisy
pneu - pneumonia
pneuitis - pneuitis
PNS - peripheral nervous system
polyneur - polyneuropathy
pros - prostration
prot - proteinuria
pyspec - psychialopecia
pulm - pulmonary
pulsus altenans - a pulse pattern in which beats occur at regular intervals, but with alternating weak and strong beats
pup - pupil
RBC - red blood cell
resp - respiratory
resp ar - respiratory arrest
rester - restrostrenal
rhin - rhinorrhea
salv - salivation
scotoma - an area of absent or depressed vision in the visual field
sens - sensitization
sez - seizure
sleep - sleepiness
sneez - sneezing
som - somnolence
spas - spasm
strabismus - abnormality of the eyes visual axes do not meet at the desired point
subs - substernal
sweat - sweating
swell - swelling
tacar - tachycardia
temp - temperature
tend - tenderness
trachbronc - tracheobronchitis
vasconst - vasoconstriction
venfib - ventricular fibrillation
verti - vertigo
vesic - vesiculation
vis dist - visual disturbance
vomit - vomiting
weak - weakness
wheez - wheezing

CODES FOR FIRST AID TREATMENT

EYE

r immed — If chemical comes in contact with the eyes, immediately wash the eyes with large amounts of water, occasionally lifting the lower and upper lids. get medical attention immediately. Contact lenses should not be worn when working with this chemical.

Irr immed (15 min) — If this chemical comes in contact with the eyes, immediately wash the eyes with large amounts of water and continue flushing for 15 minutes, occasionally lifting the lower and upper lids. get medical attention immediately. Contact lenses should not be worn when working with this chemical.

promptly — If this chemical comes in contact with the eyes, promptly wash the eyes with large amounts of water, occasionally lifting the lower and upper lids. Get medical attention if any discomfort continues. Contact lenses should not be worn when working with this chemical.

Medical attention — Self-explanatory

SKIN

st off solid; water flush — If this solid chemical comes in contact with the skin, dust it off immediately and then flush the contaminated skin with water. If this chemical, or liquids containing this chemical, penetrate through the clothing, promptly remove the clothing and flush the skin with water. Get medical attention immediately.

Medical attention for frostbite — If this chemical comes in contact with the skin or mouth, stop the exposure immediately. If frostbite has occurred, get medical attention.

Molten: flush immed; sol/ liq wash — If this molten chemical comes in contact with the skin, immediately flush the skin with large amounts of water. Get medical attention immediately. If this chemical, or liquids containing this chemical, contacts the skin, promptly wash the contaminated skin with soap and water. If this chemical, or liquids containing this chemical, penetrates through the clothing, immediately remove the clothing and wash the skin with soap and water. If irritation persists after washing, get medical attention.

tro product rinse — If this chemical or strong concentrations of this chemical's vapors comes in contact with the skin, immediately rinse the contaminated skin with kerosene or similar petroleum products, if readily available, then wash the skin with soap and water. If this liquid chemical or strong concentrations of this chemical's vapors penetrate through the clothing, immediately remove the clothing and rinse the skin with kerosene or similar petroleum products, if readily available, then wash the skin with soap and water. Get medical attention immediately.

Soap flush immed — If this chemical comes in contact with the skin, immediately flush the contaminated skin with soap and water. If this chemical penetrates through the clothing, and flush skin with water. If irritation persists after washing, get medical attention.

Soap flush promptly — If this chemical comes in contact with the skin, promptly flush the contaminated skin with soap and water. If this chemical penetrates through clothing, promptly remove the clothing and flush the skin with water. If irritation persists after washing, get medical attention.

Soap promptly/ flush immed — If this solid chemical or liquids containing this chemical, comes in contact with the skin, promptly wash the contaminated skin with soap and water. If irritation persists after washing, get medical attention. If this chemical contacts the skin or non-impervious clothing, immediately flush the affected area with large amounts of water to remove heat. Get medical attention immediately.

Soap wash — If this chemical comes in contact with the skin, wash the contaminated skin with soap and water.

Soap wash immed — If this chemical comes in contact with the skin, immediately wash the contaminated skin with soap and water. If this chemical penetrates through the clothing, immediately remove the clothing, wash the skin with soap and water, get medical attention promptly.

Soap wash promptly — If this chemical comes in contact with the skin, promptly wash the contaminated skin with soap and water. If this chemical penetrates through the clothing, promptly remove the clothing and flush skin with water promptly. If irritation persists after wash-ing, get medical attention.

Water wash immed — If this chemical comes in contact with the skin, promptly wash the contaminated skin with water. If this chemical penetrates the clothing, promptly remove the clothing and wash the skin with water. If irritation persists after washing, get medical attention.

BREATH

Art resp — If a person breathes in large amounts of this chemical, move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Keep the affected person warm and at rest. Get medical attention as soon as possible.

Fresh air — If a person breathes in large amounts of this chemical, move the exposed person to fresh air at once. Other measures are usually unnecessary.

Fresh air; 100% O_2 — If a person breathes in large amounts of this chemical, move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. When breathing is difficult, properly trained personnel may assist the affected person by administering 100% oxygen. Keep the affected person warm and at rest. Get medical attention as soon as possible.

SWALLOW

Medical immed — If this chemical has been swallowed get medical attention immediately.

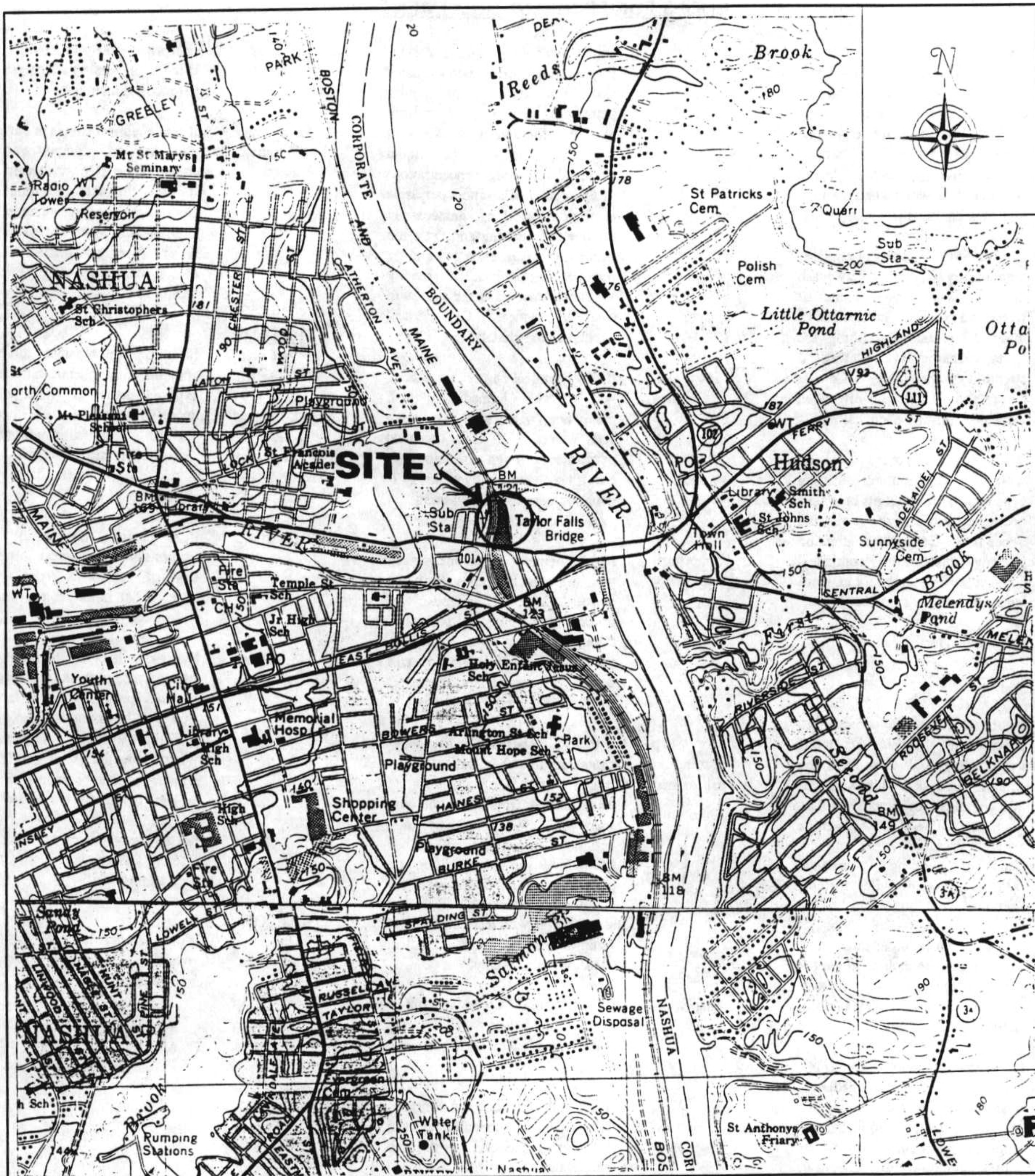


FIGURE 1	SCALE 1:24,000	WESTON® MANAGERS DESIGNERS/CONSULTANTS REGION I TECHNICAL ASSISTANCE TEAM		
SITE LOCATION MAP JOHNS MANVILLE PLANT SITE NASHUA, NEW HAMPSHIRE		DRAWN BY S. AMIRAULT	DATE 5/95	PCS # 01-9505-01
SOURCE: USGS TOPOGRAPHICAL MAP FOR NASHUA NORTH AND SOUTH, NH, 1968 & 1965. 7.5 MINUTE SERIES, PHOTOREVISED 1985, 1979.		APPROVED BY	DATE 5/95	TDD # 1321

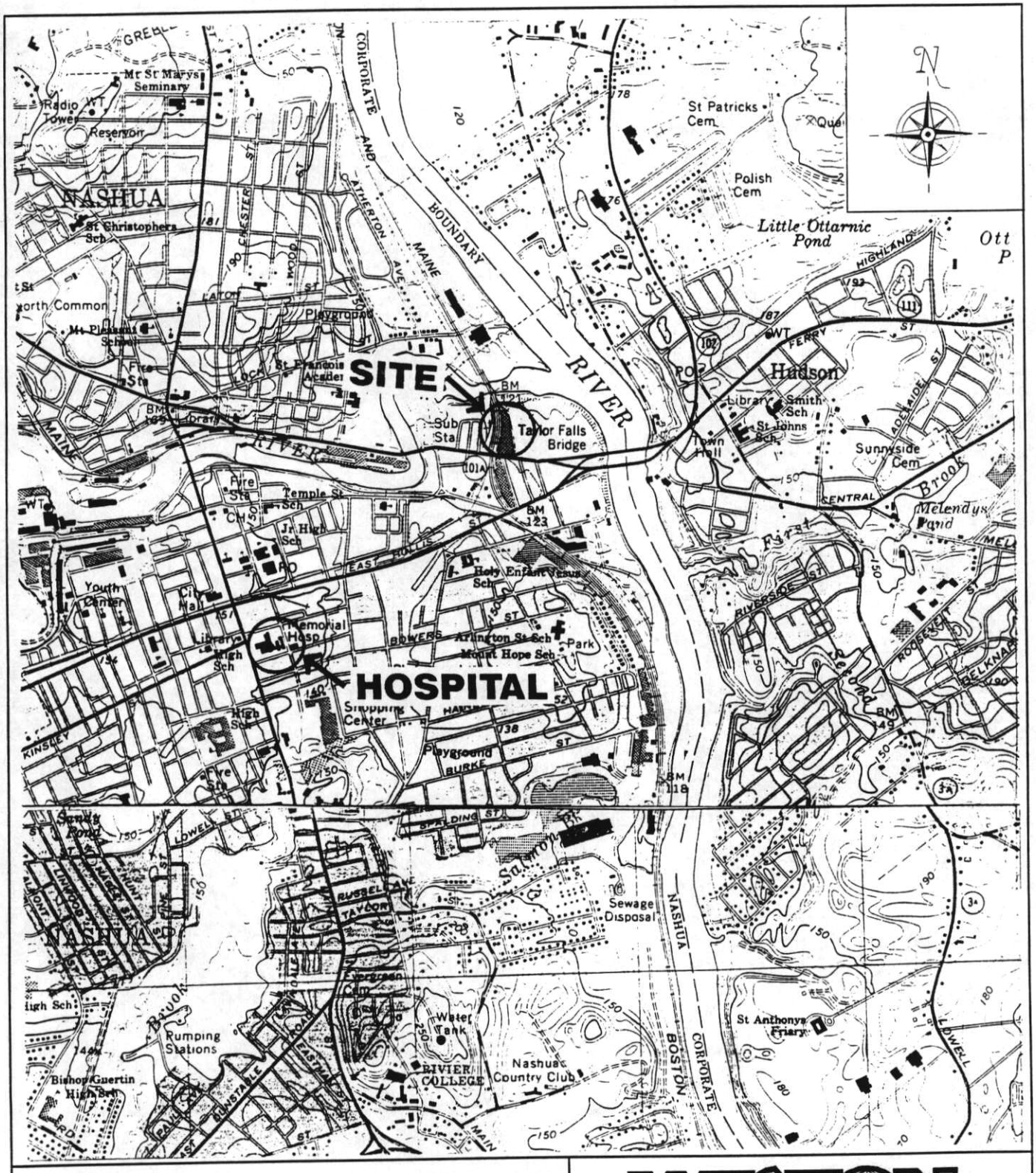


FIGURE 2

SCALE 1:24,000

HOSPITAL LOCATION MAP
JOHNS MANVILLE PLANT
NASHUA, NEW HAMPSHIRE

DIRECTIONS: EXIT SITE, LEFT ONTO BRIDGE ST., THEN RIGHT ONTO HOLLIS ST. FOLLOW FOR APPROX. 1 MILE, THEN LEFT ONTO DEARBORN ST., THEN RIGHT ONTO PROSPECT ST. AND INTO HOSPITAL.

WESTON®
MANAGERS DESIGNERS/CONSULTANTS
REGION I TECHNICAL ASSISTANCE TEAM

DRAWN BY S. AMIRAULT	DATE 5/95	PCS # 01-9505-01
APPROVED BY	DATE 5/95	TDD # 1321

APPENDIX B

Inventory List

CONTAINER INVENTORY
JOHNS MANVILLE COMPANY SITE
40 BRIDGE STREET – 10 SANDERS STREET
NASHUA, NEW HAMPSHIRE
11 MAY 1995

Container Label (Contents from label)	Container Size	Quantity
40 BRIDGE STREET		
In / near storage cabinet at entrance		
Acetone	5 gallon	1
Enamel Paint – Deck Grey	5 gallon	1
General Purpose Lubricating Oil	1 quart	21
Laminating Epoxy Part B (Alkaline liquid – Corrosive)	1 quart	2
433 Brush Ease (Petroleum distillates)	1 quart	1
105 Epoxy Resin (Bis phenol)	1 quart	2
ORC Part A Epoxy	1 quart	2
Dupont Fast Drying Wood Stain	1 quart	2
General Purpose Grease	1 quart	2
Varnish	1 quart	1
Isopropyl Alcohol	8 ounces	1
Davis Howland Co. – Silicone Damping Fluid	16 ounce	3
Lubricating Oil	16 ounce	2
Metal Polish (Solvents and Ammonia)	16 ounce	3
Standard Reducer for Epoxy Primers (Toluene, Butyl Alcohol, MEK, Propylene Glycol – Flammable)	1 gallon	1
Sherwin Willaims Ultra Acrylic Primer (Toluene)	1 gallon	5
Floor Wax (Combustable label)	1 gallon	3
Raw Linseed Oil	1 gallon	2
Conap Conathane LE–164	1 gallon	1
Adhesives – Steven Industries, Vayone, NJ	1 quart	6
MB–5785 Converter Portion Devran 184 – Devoe Marine (Modified Aliphatic Acid)	16 ounce	10
MU–2931 Converter Portion Devran 207 Blue – Devoe Marine (Polymeric Amino Amine, Ethylene Glycol, Mono Ether Ether)	16 ounce	10
Awl Grip Polyurethane Top Coat Navy Blue/ Bristol Blue (Ethylene Glycol, Toluol, MEK, Flammable)	1 quart	4
Epoxy Part A & Part B	1 gallon	4
Epoxy Part A & Part B	1 quart	10
NCC Biostat Fuel Oil Preservative	1 gallon	1
Ameron Amercoat Primer	16 ounce	3
Amercoat 65 Paint Thinner	1 gallon	4
Epoxy Resin	2 pound	1
Gasket Sealing Compound	16 ounce	4
Epoxy Paste	16 ounce	2
Sika Flex – Urathane Primer	16 ounce	4

CONTAINER INVENTORY
JOHNS MANVILLE COMPANY SITE
40 BRIDGE STREET – 10 SANDERS STREET
NASHUA, NEW HAMPSHIRE
11 MAY 1995

Container Label (Contents from label)	Container Size	Quantity
Everflex Epoxy Paste Glue	16 ounce	10
Silicone Carbide Compound	16 ounce	1
Mold Release – Aerosol	16 ounce	4
Kidcon 34 Insulating Compound – Aerosol	16 ounce	1
Met–L–Chek Developer D–70 (Flammmable)	12 ounce	1
Polyurethane	1 gallon	1
Great Patch	50 pound	1
Super Spar Varnish – Interlux	16 ounce	7
414 Interlux Epoxy Reactor (Poly Amine Resin, Naphtha, Phenol)	1 quart	10
VSG Epoxycal 408 Surface Coat Resin	1 quart	6
Non Skid Particles	13 ounce	5
Molybdenum Disulfide Grease	1 gallon	1
Multi–purpose Grease	1 gallon	1
General Purpose Grease	1 pound	7
Grease	5 pound	2
Liquid Resin	1 kilogram	2
Steel Putty Plus	1/2 pound	1
Boat Renew Resin	1 gallon	1
PVC Sealant	1 gallon	1
Grease (Hazard Material Sticker)	1 quart	4
Delux Gloss Silicone Alclyide Deck Enamel	1 quart	4
Clear Gloss Urethane	1 quart	7
Construction Adhesives	1 quart	3
Latex Enamel	1 quart	2
Filler Paste	1 quart	1
PVC Sealant (Tetra Hydrochloride)	1.5 Liters	14
Wall board Compound	12 pound	2
Latex Paint	1 gallon	2
Chaulk Fast Orange Caulking Compounds	15 pound	2
Paint	1 gallon	1
Heavy Duty Clear Wall Covering Adhesive	1 gallon	2
Fire Resistant Insulation	1 gallon	2
Septic Tank Cleaner (Sodium Hydroxide)	1 gallon	1
Top Coat Paint	1 gallon	2
Corrossion Preventative Aerosol	16 ounce	50
High Temperature Surface Hardener	4 ounce	5
Bronze Putty	1 pound	4
Anti–Seize Compound	1 pound	1

CONTAINER INVENTORY
JOHNS MANVILLE COMPANY SITE
40 BRIDGE STREET – 10 SANDERS STREET
NASHUA, NEW HAMPSHIRE
11 MAY 1995

Container Label (Contents from label)	Container Size	Quantity
C Sealant Activator	6 ounce	3
Sealing Compound	8 ounce	1
PVC Cement	4 ounce	1
Unknown	16 gallon	1
Unknown	1 gallon	3
Unknown	16 ounce	4
Unknown	1 quart	6
Unknown – Oil Liquid	55 gallon	1
Unknown – Oil Liquid	30 gallon	1
Unknown – Oil Liquid	5 gallon	1
Unknown – Oil Liquid	1 gallon	1
Total in Entrance Area		314
Near Loading Dock / Tool Room Area:		
Epoxy	15 gallon	2
Ultra Gloss Floor Finish	5 gallon	3
Cleaning Compounds	5 gallon	7
Antifreeze	5 gallon	2
Rust Scale Remover (Pyphoric Acid)	5 gallon	1
6% Concentrate – Commercial Grade	5 gallon	2
Rust Scaler Scale Preventative Compound	5 gallon	1
Epoxy Resin	5 gallon	1
Ansulite Aqueous Film Forming Concentrate	5 gallon	5
Curing Agent	5 gallon	1
Oils	5 gallon	3
Metal Binder	10 gallon	1
Unknown – Hand labeled "Antifreeze"	55 gallon	1
Unknown – Hand labeled "Floor Soap"	60 gallon	1
Unknown	5 gallon	2
Aluminum Silicate Mortar Patch Cement	5 gallon	10
Other Areas of Building:		
Unknown – Oil Liquid in former boiler room	5 gallon	3
Unknown – Oil Liquid in front of building	55 gallon	2
Unknown – in front of building	5 gallon	2
Roofing Tar – in front of building	5 gallon	1
Ammonium Silicate – in front of building	5 gallon	1
Electrical capacitors (leaking)	NA	2
Transformers in Basement – 5 KVA, 50 CV	NA	3

CONTAINER INVENTORY
JOHNS MANVILLE COMPANY SITE
40 BRIDGE STREET – 10 SANDERS STREET
NASHUA, NEW HAMPSHIRE
11 MAY 1995

Container Label (Contents from label)	Container Size	Quantity
Main Transformer Adjacent to building (leaking)	NA	1
Miscellaneous containers with unknowns	1 – 5 gallon	94
Total Containers in 40 Bridge Street		466
10 SANDERS STREET		
Enamel Paint – New England Paint Color 23619, Chamois Hazard Label Ratings– Health 2, Flammability 3, Reactivtiy 0, Protective Equipment B.	5 gallon	9
Enamel Paint – International Paint Co. MIL–E–7907C Formula 124, Non–Flaming / Dry Chlorinated Alkyd Resin	5 gallon	15
Unknown in gas can	5 gallon	1
Unknown	5 gallon	1
Unknown – Oil Liquid	5 gallon	2
Transformers on Platform – 5 KVA, 50 CV	NA	3
Capacitors on Platform, Type CH–1, 60 Cycle	NA	4
Capacitor on Platform	NA	1
Total Containers in 10 Sanders Street		28

APPENDIX C

Site Sampling Quality Assurance/Quality Control (QA/QC) Plan

JOHNS MANVILLE COMPANY SITE
SAMPLING QUALITY ASSURANCE/ QUALITY CONTROL PLAN
NASHUA, NEW HAMPSHIRE

Prepared For:

U.S. Environmental Protection Agency
Region I
60 Westview Street
Lexington, MA 02173

CONTRACT NO. 68-W0-0036

TDD NO. 01-9505-01

PCS NO. 1321

DC NO. 02628

Prepared By:

ROY F. WESTON, INC.
Technical Assistance Team
Region I

May 1995

TABLE OF CONTENTS

PAGE

LIST OF FIGURES

LIST OF TABLES

LIST OF ATTACHMENTS

1.0 BACKGROUND - SITE DESCRIPTION AND HISTORY

The former Johns Manville Company facility is located at 40 Bridge Street and 10 Sanders Street in the city of Nashua, Hillsborough County, New Hampshire (Figure 1 - Site Location Map). The site is bordered to the North by the Nashua River, to the South by Bridge Street, to the West by several industrial properties, and to the East by industrial properties followed by the Merrimack River. The company manufactured asbestos- based insulation materials until filing for bankruptcy in the 1980s. According to the Nashua Fire Marshall, there is asbestos-containing materials (ACM) present in the abandoned buildings. The 40 Bridge Street building occupies approximately 100,000 square feet, while the 10 Sanders Street building occupies approximately 25,000 square feet (Figure 2 - Site Diagram). The City of Nashua is considering appropriating the property for unpaid property taxes, and requested that the U.S Environmental Protection Agency (EPA) perform an assessment to assist the city in determining the extent of hazardous materials remaining in the facility.

2.0 OBJECTIVES

The objective of this sampling survey is to obtain sufficient analytical data from a representative number of samples which could be used to determine whether further actions at the site by the EPA, Region I, Emergency Planning and Response Branch (EPRB) are necessary.

3.0 DELIVERABLES

In addition to this sampling quality assurance/quality control (QA/QC) plan, a Comprehensive Site Investigation Report (CSIR), documenting project activities at the site will be generated by Roy F. Weston, Inc., Technical Assistance Team (TAT). If samples are collected, copies of the chain-of-custody (COC) documentation will be included in Attachment I. COC documentation may include: COC record(s), sampling cards, and Notice to the Laboratory forms regarding potential hazards of the samples. Sample locations will be illustrated in Figure 3. If any modifications are made to the practices described in this sampling QA/QC plan, they will be documented in Attachment II to this report when the sampling is completed and the report is finalized.

4.0 QUALITY ASSURANCE LEVELS

The quality assurance (QA) level for the on-site air monitoring activities will be QA1, as detailed in Section 7.1 of this document. The QA levels are described in Section 2.7 of OSWER Directive 9360.4-01 (April 1990-Interim Final), *Quality Assurance/Quality Control Guidance for Removal Activities, Sampling QA/QC Plan and Data Validation Procedures, EPA/540/G-90/004* (OSWER). QA1 activities include the use of the following instrumentation/test equipment:

- Photoionization Detector Model HW-101, ISPI - 101, or PI-101 by HNU Systems, Inc. or Photovac MicroTip, Model HL-2000 by Photovac International.

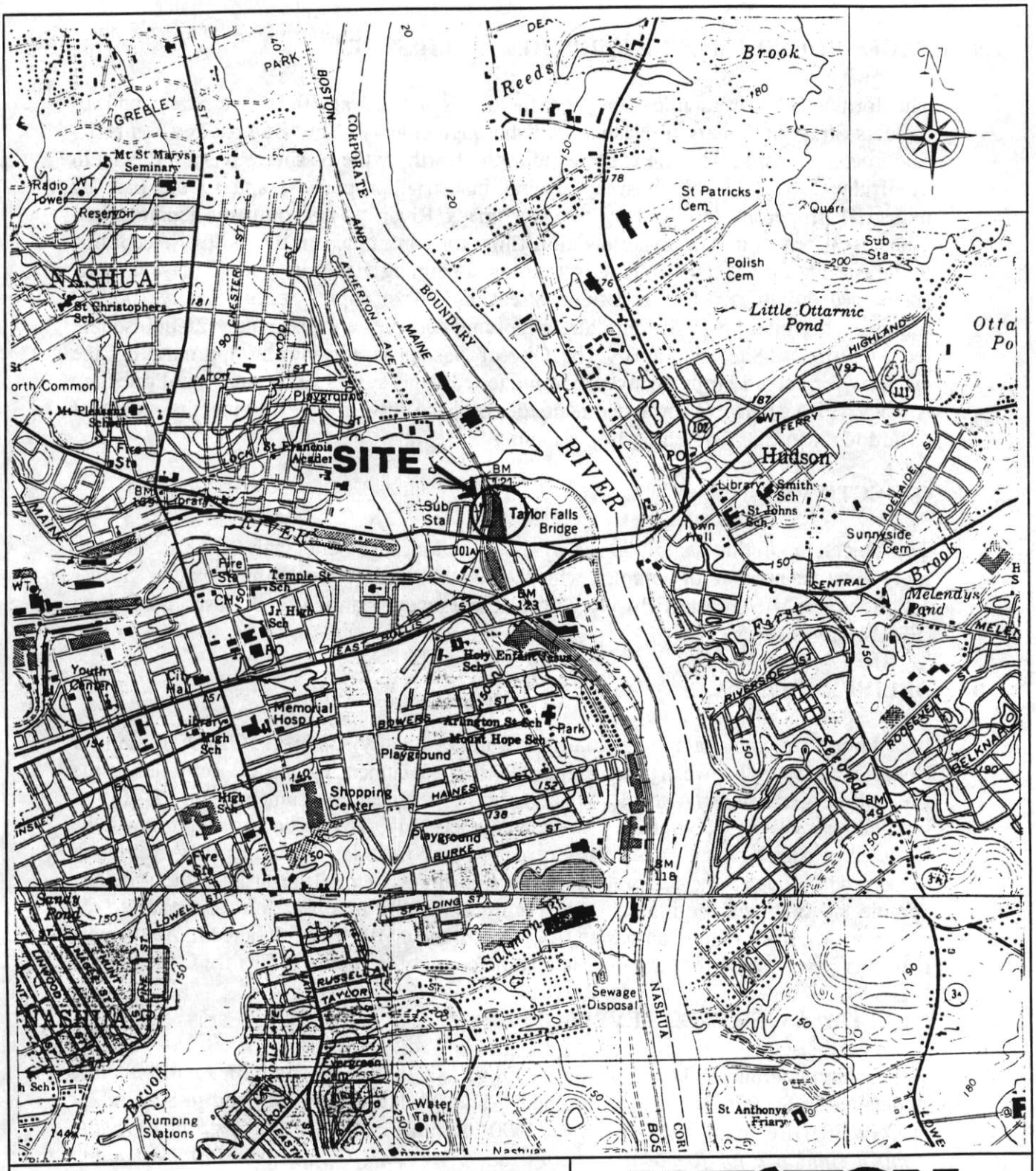


FIGURE 1

SCALE 1:24,000

SITE LOCATION MAP
JOHNS MANVILLE PLANT SITE
NASHUA, NEW HAMPSHIRE

SOURCE: USGS TOPOGRAPHICAL MAP FOR NASHUA NORTH AND SOUTH, NH, 1968 & 1965. 7.5 MINUTE SERIES, PHOTOREVISED 1985, 1979.

WESTON®
MANAGERS DESIGNERS/CONSULTANTS
REGION I TECHNICAL ASSISTANCE TEAM

DRAWN BY	DATE	PCS #
S. AMIRAULT	5/95	01-9505-01
APPROVED BY	DATE	TDD #
	5/95	1321

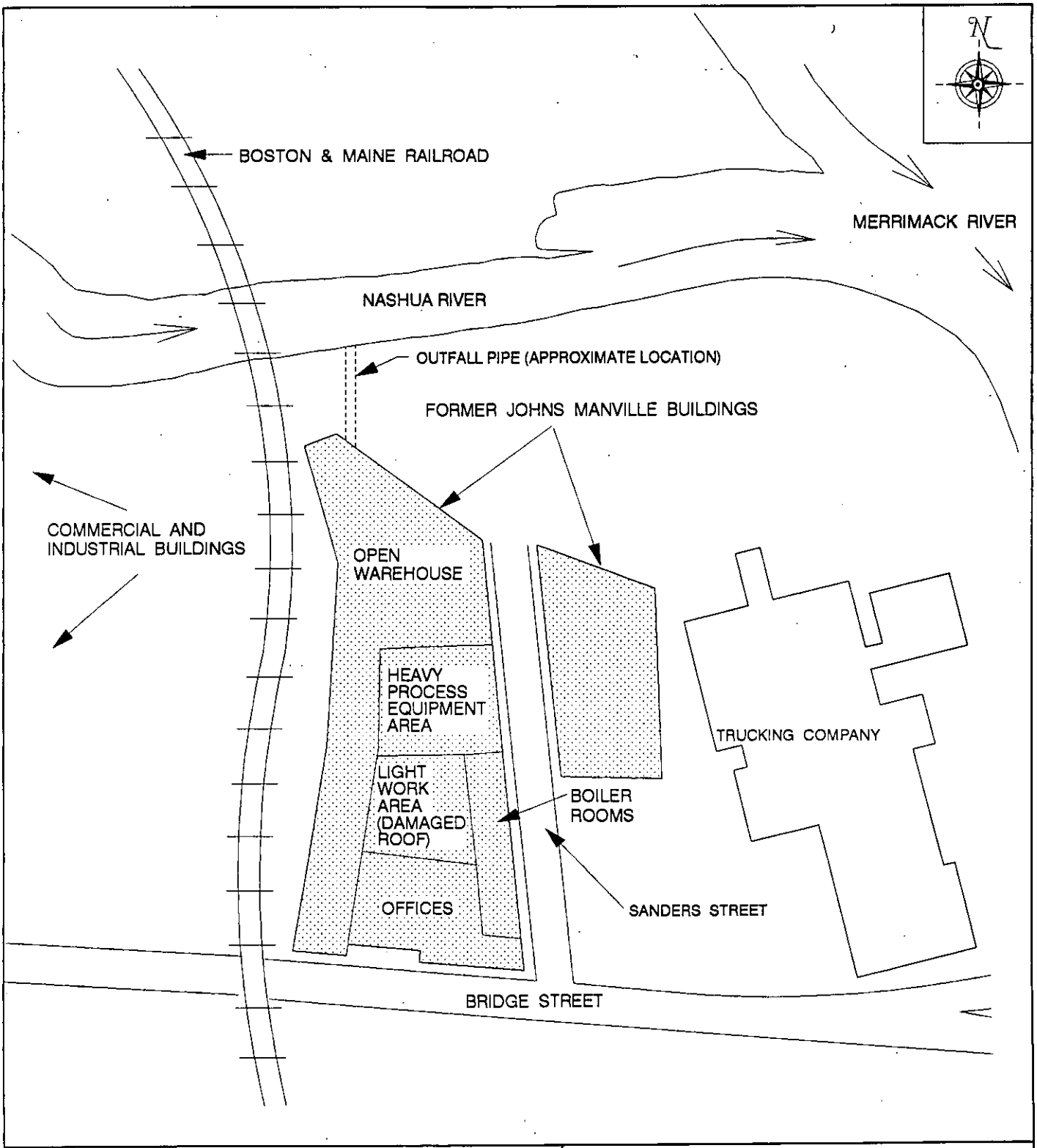


FIGURE 2

NOT TO SCALE

SITE DIAGRAM
JOHNS MANVILLE PLANT SITE
NASHUA, NEW HAMPSHIRE

FIGURE DEVELOPED FROM AN AERIAL PHOTOGRAPH NOT DATED, PROVIDED BY THE CITY OF NASHUA.

WESTON®
MANAGERS DESIGNERS/CONSULTANTS
REGION I TECHNICAL ASSISTANCE TEAM

DRAWN BY	DATE	PCS #
S. AMIRAULT	05/95	1321
APPROVED BY	DATE	TDD #
	6/95	01-9505-01

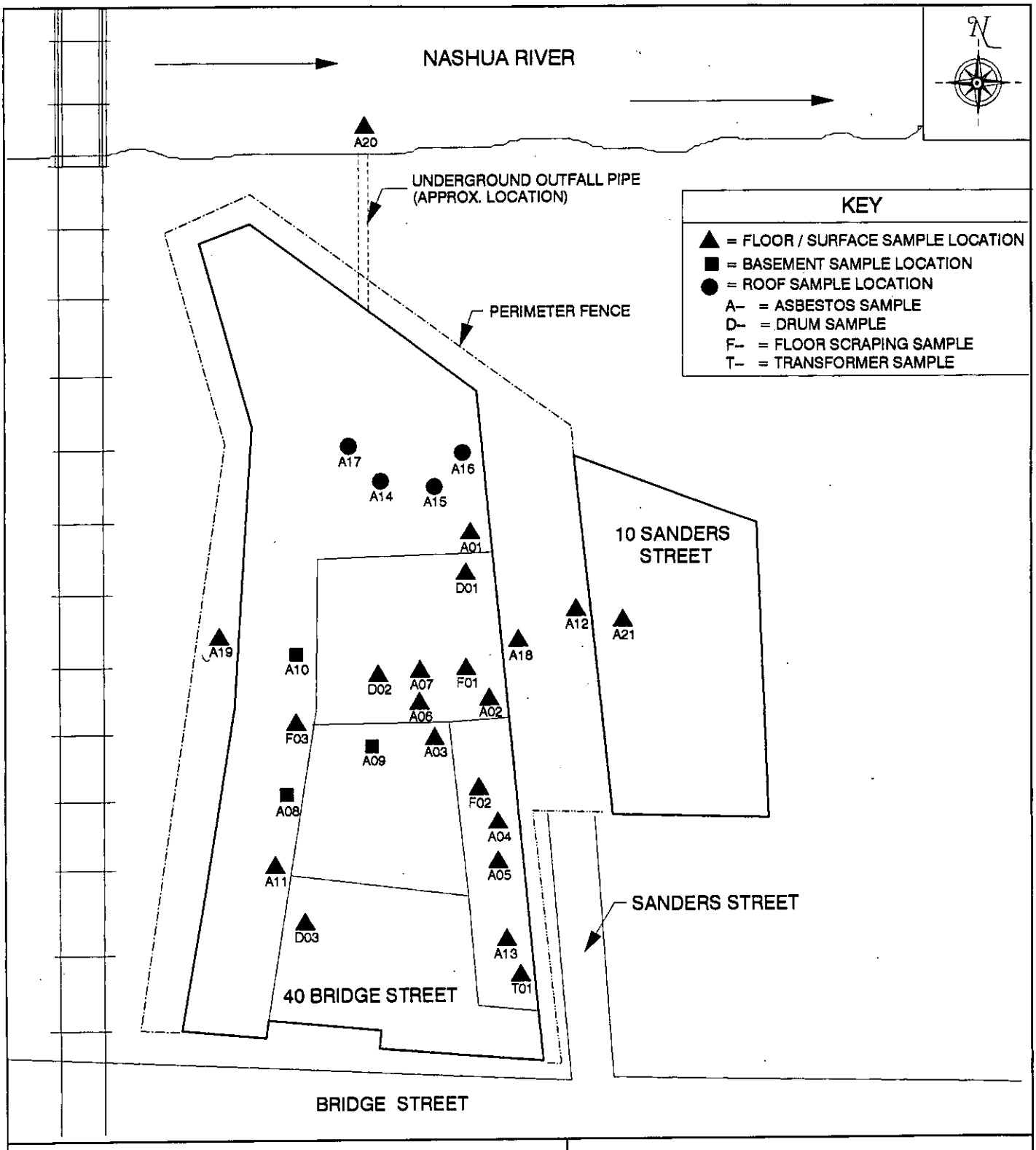


FIGURE 3

NOT TO SCALE

SAMPLE LOCATION MAP
JOHNS MANVILLE PLANT SITE
NASHUA, NEW HAMPSHIRE

WESTON®
MANAGERS DESIGNERS/CONSULTANTS
REGION I TECHNICAL ASSISTANCE TEAM

DRAWN BY	DATE	PCS #
S. AMIRAULT	06/95	1321
APPROVED BY	DATE	TDD #
	06/95	01-9505-01

- Combustible Gas Indicator/Oxygen Meter Model 260 or MicroGard by MSA.
- Radiation Meter, Model 490 by Victoreen or Model 3 by Ludlum.
- Radiation Meter, Micro R Meter, Model 19 by Ludlum.

The samples collected for laboratory analysis will be analyzed at the EPA New England Regional Laboratory (NERL). Samples are identified using an internal classification designation (Screening, Quick Turnaround, or EPA Standard Method) which refers to the method of analysis being performed at NERL. These methods are generally used to analyze for high, medium, and low levels of anticipated contamination, respectively. This classification system was instituted by EPRB and NERL on June 25, 1992.

See Section 7.0 for quality assurance requirements.

5.0 APPROACH AND SAMPLING METHODOLOGIES

The relative sampling protocols used to develop this sampling plan are described in a Roy F. Weston, Inc. draft inter-office memorandum, *Technical Assistance Team Sampling Protocols*, dated March 1992.

The sampling survey will be conducted on Wednesday, 10 May 1995 as part of a preliminary assessment. Field screening, air monitoring and/or visual observation will be used to determine the location and number of samples to be collected. Wherever practical, samples will be collected from the least contaminated locations first. The samples will be containerized, preserved, and analyzed in accordance with Table 1. EPA chain-of-custody procedures will be utilized for all sampling activities. Samples will be disposed of by the laboratory performing the analyses. All contaminated sampling materials will be disposed of by NERL.

During this sampling survey, up to 12 soil, 21 drums, 17 surface water, 30 solid and three wipe samples will be collected from sample locations at the site. All samples will be submitted to NERL for base neutral acids (BNAs), polychlorinated biphenyls (PCBs) volatile organic compounds (VOCs), flashpoint, pH, oil identification and asbestos analyses. Sample station locations will be selected by the EPA on-scene coordinator (OSC).

5.1 Soil Sampling

The number of soil samples and the sample locations will be determined by the OSC. Surface samples (0-3 inches in depth) will be collected over a surface area of one square foot per sample station. The area will be prepared for sampling by carefully removing extraneous material from the top layer of the soil.

To increase data reliability and reproducibility, it is desirable to homogenize soil samples before sending samples for analysis. Samples collected for VOC analysis will not be homogenized due to potential loss of the target compounds.

TABLE 1
JOHNS MANVILLE COMPANY SITE
SAMPLING SUMMARY, ANALYTICAL METHODS, AND QA/QC SAMPLES

MATRIX	SUBTOTAL #SAMPLES	ANALYTICAL PARAMETER	VOLUME	CONTAINER	PRESERVATIVE	METHOD	HOLDING TIME	QA/QC SAMPLES (type, volume, container)	TOTAL # SAMPLES
WATER	1	BNAs	2 x 8 oz.	AMBER GLASS	ICE	QUICK TURNAROUND	7 DAYS	NO ADDITIONAL VOLUME REQUIRED	1
LIQUID	10	Flashpoint	40 mL	GLASS	ICE	QUICK TURNAROUND	NA	NO ADDITIONAL VOLUME REQUIRED	10
WATER	5	Oil / ID	2 Liters	AMBER GLASS	ICE	QUICK TURNAROUND	NA	NO ADDITIONAL VOLUME REQUIRED	5
WATER	5	VOCs	3 x 40 mL	GLASS	ICE	QUICK TURNAROUND	7 DAYS	TRIP BLANKS 3 x 40 mL *	6
SOIL	1	BNAs	40 mL	GLASS	ICE	QUICK TURNAROUND	14 DAYS	NO ADDITIONAL VOLUME REQUIRED	1
SOIL	1	PCBs	40 mL	GLASS	ICE	QUICK TURNAROUND	14 DAYS	NO ADDITIONAL VOLUME REQUIRED	1
OIL SOIL	1	Oil / ID	40 mL	GLASS	ICE	QUICK TURNAROUND	NA	NO ADDITIONAL VOLUME REQUIRED	1
AQUEOUS SOIL	5	pH	4 oz.	GLASS	ICE	STANDARD METHODS	ASAP	NO ADDITIONAL VOLUME REQUIRED	5
DRUM	8	BNAs	40 mL	GLASS	ICE	QUICK TURNAROUND	14 DAYS	NO ADDITIONAL VOLUME REQUIRED	8
DRUM	5	PCBs	40 mL	GLASS	ICE	QUICK TURNAROUND	14 DAYS	NO ADDITIONAL VOLUME REQUIRED	5
DRUM	5	VOCs	40 mL	GLASS	ICE	QUICK TURNAROUND	14 DAYS	TRIP BLANKS 3 x 40 mL *	6
SOLIDS / SOIL	30	ASBESTOS	40 mL	GLASS OR PLASTIC BAG	ICE	QUICK TURNAROUND	NA	NO ADDITIONAL VOLUME REQUIRED	30
WIPES	3	PCBs	–	GLASS	ICE	STANDARD METHODS	14 DAYS	1 WIPE BLANK 1 WIPE BLANK SPIKE 1 DUP. SAMPLE	6

ASAP – AS SOON AS POSSIBLE.

NA – NOT APPLICABLE.

* – ONLY ONE SET OF TRIP BLANKS REQUIRED PER SAMPLE COOLER.

Sample Collection Procedures for Surface Soil Samples (except VOC samples): Samples will be collected using disposable scoops and placed directly into the appropriate (see Table 1) prelabelled glass containers (preferably wide-mouthed) with Teflon-lined lids. Containers will be filled half full. Samples will be manually homogenized by mixing the soil thoroughly with the scoop used to collect the sample, then the cap(s) will be secured tightly on the container(s). Samples will be preserved by immediately placing on ice.

- VOC Sampling: Samples will be placed directly into appropriately labelled 40-ml glass VOA vials. Vials will be filled completely and the soil packed well to minimize air space in the vials. The cap(s) will be secured tightly and the vials placed in separate resealable plastic bags to minimize cross-contamination.

  One VOA trip blank sample consisting of either three 40-ml or one 40-ml and two 125-ml VOA vials of organic-free water will be collected from NERL prior to sampling. The vials used for the trip blank sample will be from the same lot as the corresponding sample vials. Each bottle of the trip blank sample will be preserved with one drop of 1:1 HCl per 20 ml of sample. The pH will be tested with pH paper to confirm that the pH is <2. If not, more HCl will be added until pH is <2. The same number of drops will be used to preserve the surface water samples collected for that sampling event. The trip blank sample will be handled in the same fashion as the samples collected in the field. The trip blank sample will be transported to the field with the empty vials and returned to the laboratory in the same cooler as the samples.

5.2 Drum Sampling

Drums will be sampled after monitoring for potential radiation, organic vapors and combustible gases in the vicinity. The number of samples and the drums to be sampled will be determined by the OSC. Drums will be visually inspected for signs of leakage, rust and corrosion deterioration, bulging and markings which may help determine the contents of the drum. Drums deemed unsafe based upon the inspection will not be sampled. If it is decided that drum sampling will proceed and access to the drum(s) is not restricted, the drums will be opened with a non-sparking bung wrench.

Sample Collection Procedures for Drum Sampling: After the drum has been opened and the head space gases monitored for combustible gases, a dedicated glass sample rod (drum thief) will be used to collect a sample. The contents of the sample rod will be transferred to an appropriate (see Table 1), prelabelled sample container. Samples will be preserved by immediately placing containers in a cooler with ice. If the drum contains sludge or a sludge layer, the drum waste may form a plug in the bottom

of the sample rod. The plug can be gently removed and placed into the sample container by the use of a stainless steel lab spoon/spatula.

If the drum contains solids only, samples may be taken with a stainless steel spatula. A plastic spatula may be used for taking pH, metals and oil identification samples. If a commercially-available plated trowel is used to collect the samples, a rinsate blank must be collected for metals analysis prior to using the trowel for sample collection. If possible, avoid using the trowel for collecting metals samples.

- VOC Sampling: The proper collection of a sample for VOC analysis requires minimal disturbance of the sample and minimal headspace in the sample container to minimize volatilization and prevent loss of volatiles from the sample. Samples will be collected into 40-ml glass vials using dedicated glass sampling rods and placed in separate resealable plastic bags.

  One VOA trip blank sample consisting of either three 40-ml or one 40-ml and two 125-ml VOA vials of organic-free water will be collected from NERL prior to sampling. The vials used for the trip blank sample will be from the same lot as the corresponding sample vials. Each bottle of the trip blank sample will be preserved with one drop of 1:1 HCl per 20 ml of sample. The pH will be tested with pH paper to confirm that the pH is <2. If not, more HCl will be added until pH is <2. The same number of drops will be used to preserve the surface water samples collected for that sampling event. The trip blank sample will be handled in the same fashion as the samples collected in the field. The trip blank sample will be transported to the field with the empty vials and returned to the laboratory in the same cooler as the samples.

- Flashpoint Sampling: Liquid samples will be collected using dedicated glass drum thieves and placed into a 40-ml glass vial. The samples are then preserved by placing them in a cooler with ice. Solid samples will be collected using dedicated stainless steel or plastic spatulas, placed into a 40-ml glass vial, and preserved by placing the vials in a cooler with ice.

- pH Sampling: Liquid samples will be collected using dedicated glass drum thieves and placed into a 40-ml glass vial. The samples are then preserved by placing them into a cooler with ice. Samples collected for pH analysis must be transported to a laboratory for analysis as soon as possible after collection. If the drum waste is a liquid or wet sludge, the field pH may be determined by touching a piece of pH paper to the drum waste coating the outside of the drum thief. The field pH should then be recorded on the chain-of-custody record. Solid samples will be collected using dedicated stainless steel or plastic spatulas and placed into a 40-ml glass vial. The sample vials are then placed into a cooler with ice.

Disposal of Dedicated Glass Sampling Rods (Drum Thieves)

Glass drum thieves must be broken and disposed in a proper fashion. Wearing heavy gloves to provide chemical and physical protection, break the glass rods into approximately 12-inch lengths and place the pieces into a separate container for transportation to NERL for proper disposal by the safety officer.

5.3 Surface Water Sampling

The number of samples and the sample locations of surface water samples to be collected will be determined by the OSC. For streams, rivers, lakes, and other surface waters, the direct method may be utilized to collect water samples from the surface. This method is not to be used for sampling lagoons or other impoundments where contact with contaminants is a concern. The direct method may also be used when collecting samples from outfall pipes where effluent flow is sufficiently low to avoid exposure from splashing. A dipper may be used to collect surface water samples from outfall pipes, lagoon banks or any other location where direct access is limited. The long handle allows access from a safe, discreet location.

It is not expected that surface water samples will contain free chlorine unless they are treated effluent samples or are collected near the outfall of a treated water effluent. If chlorination is suspected, test the water for free chlorine by adding one DPD free chlorine reagent powder pillow to approximately 5 ml of sample, mix and wait approximately one - two minutes (low water temperatures slow the reaction rate). Free chlorine is indicated by a pink color. Color that develops after more time has elapsed is likely due to other oxidizers present in the sample reacting with the DPD reagent and may be disregarded. If an alternate field test is used to test for free chlorine, follow manufacturer's directions. When collecting samples for VOC, BNA or cyanide analyses, samples that test positive for residual chlorine will require treatment with a reducing agent before sample preservation.

Sample Collection Procedures for Direct Surface Water Sampling: The sampling station will be accessed by appropriate means. For shallow stream stations, the sample will be collected under the water surface pointing the prelabelled sample container upstream. See Table 1 for selection of the appropriate container. The container must be upstream of the collector. The sampler(s) will avoid disturbing the substrate. For lakes and other impoundments, the sample will be collected under the water surface avoiding surface debris, any boat wakes, and contact with the sampler's gloves.

When using the direct method, do not use pre-preserved sample bottles as the collection method may dilute the concentration of the preservative necessary for proper sample preservation. Specific preservation methods for each analytical parameter are presented below.

Sample Collection Procedures for Dipper Surface Water Sampling: Assemble a dipper device by fastening a wide-mouth glass sampling jar to a long handle. Extend the device to the sample location and collect the sample. Retrieve the sampler and transfer the sample to the appropriate, prelabelled sample container(s).

When using the dipper method, dedicate one wide-mouthed glass sampling jar to each sampling station to avoid cross-contamination of samples. Specific preservation methods for each analytical parameter are presented below.

- VOC Sampling: The proper collection of a sample for VOC analysis requires minimal disturbance of the sample to limit volatilization and therefore prevent loss of volatiles from the sample. VOA bottles will not be filled or preserved near a running motor or any type of exhaust system due to possible contamination by discharges, fumes or vapors. If the sample has tested positive for free chlorine, treat and preserve the sample as required. If requesting NERL Screening or Quick Turnaround analysis, collect three 40-ml VOA vials for each sampling location.

  1) Each sample bottle will be filled just to overflowing (forming a convex meniscus) in such a manner that no air bubbles pass through the sample as the bottle is being filled.
  2) The pH will be adjusted to <2 by carefully adding one drop of 1:1 HCl (6N HCl) for each 20 ml of sample volume (two drops for each 40-ml VOA vial).
  3) The bottle will be sealed so that no air bubbles are entrapped. The sealed bottle will be inverted, tapped gently on the side, and observed for 10 seconds for the presence of air bubbles. If an air bubble appears, the sample will be discarded and the collection procedure repeated.
  4) VOC samples will be collected in three sample bottles (three 40-ml VOA vials for Screening or Quick Turnaround analyses or one 40-ml VOA vial and two 125-ml sample bottles with septa for EPA Standard Methods analysis). The three bottles will be shaken vigorously for 1 minute to mix the preservative, placed in a resealable plastic bag, and placed into a cooler with ice.

  One VOA trip blank sample consisting of either three 40-ml or one 40-ml and two 125-ml VOA vials of organic-free water will be collected from NERL prior to sampling. The vials used for the trip blank sample will be from the same lot as the corresponding sample vials. Each bottle of the trip blank sample will be preserved with one drop of 1:1 HCl per 20 ml of sample. The pH will be tested with pH paper to confirm that the pH is <2. If not, more HCl will be added until pH is <2. The same number of drops will be used to preserve the surface water samples collected for that sampling event. The trip blank sample will be handled in the same fashion as the samples collected in the field. The trip blank

sample will be transported to the field with the empty vials and returned to the laboratory in the same cooler as the samples.

- BNA Sampling: Samples will be collected in the appropriate glass container and preserved by placing in a cooler with ice. If the sample tests positive for free chlorine, the sample will be treated and preserved as required.

- Pest/PCB Sampling: Samples will be collected in the appropriate glass container and preserved by placing in a cooler with ice.

- Metals Sampling: Samples will be collected in the appropriate plastic container and preserved with nitric acid (HNO_3) to a pH of <2. Sample bottles will then be placed in a cooler with ice.

5.4 Asbestos Material Sampling

Samples will be collected using disposable scoops and placed directly into the appropriate (see Table 1) labelled glass containers (preferably wide-mouthed) with Teflon-lined lids. Containers will be filled half full. Samples will be manually homogenized by mixing the soil (if applicable) thoroughly with the scoop used to collect the sample, then the cap(s) will be secured tightly on the container(s). Samples will be preserved by immediately placing on ice.

5.5 Wipe Sampling

Up to three wipe surface samples will be collected for PCBs, metals, cyanide, and BNA analyses. The sample locations will be determined by the EPA OSC.

Please note that wipe samples should be collected from smooth non-porous surfaces only. It is not considered appropriate for porous surfaces. If porous surfaces are to be sampled, then a discrete object of the sample matrix (using a chisel or drill if necessary) should be removed and submitted for analysis. Depths of less than 1 centimeter of the discrete object should be collected.

5.5.1 General Comments:

- It is not possible to perform multiple analyses from the same sample station. Once a sample station has been wiped for one parameter (e.g., PCBs) it is not possible to then wipe the same area for another parameter (e.g., metals).

- It is not possible to collect field duplicate samples. Once a sample station has been wiped for a particular parameter, the contaminant has been removed, making it impossible to collect a duplicate. Instead, a collocated sample shall be collected at an adjacent location, abutting the

first location. The field duplicate should be collected at a frequency of 5-10% depending on site requirements.

- It is imperative that the total area wiped [in square centimeters (cm^2) or square inches (in^2)] be recorded on the chain-of-custody record.

- A Lot Blank should be submitted to check for contamination in the sampling media (wipes) which would produce false positive results strictly due to the wipe itself. Wipes from each lot should be analyzed for each parameter.

- Laboratory Duplicate/Spike Samples. It is not possible to collect extra volume to provide the laboratory with sufficient sample for laboratory duplicates or spikes. Therefore, it is recommended that the laboratory be provided with two clean wipes for performing blank spike/duplicate spike analyses per parameter.

- Before wiping with any solvent (or corrosive) it should be verified that the surface to be wiped will not be degraded by the solvent (or corrosive).

- Decontamination procedures should be performed on the stainless steel forceps and template (if used) prior to sampling the next station so as to prevent cross contamination.

5.5.2 Pesticide/PCB Samples

- Using stainless steel forceps, remove a filter paper (Whatman #4). (It is important to prevent contact between the wipe and the samplers gloves.) Moisten the filter paper using pesticide-grade **hexane**. The filter paper should be damp but not dripping wet.

- Place the template in position for sampling.

- Using the forceps, tongs, or other tool, swab the sample area marked by the template using a back and forth motion in the horizontal direction covering the entire area one time. With a clean portion of the same pad (i.e., other side), wipe the area a second time in the vertical direction using the same back and forth motion.

- Still using forceps or tongs, carefully place the wipe into a clean glass jar with a teflon-lid (such as a 4-ounce sampling jar).

- Record the pertinent information on the chain-of-custody record, especially the total area wiped.

- The wipe sample should be analyzed by a laboratory using EPA-approved methodology. Typically this is performed by adding a known amount of

hexane and extracting the Pest/PCBs using sonification. The hexane solution is then decanted and blown down to a known volume (such as 1 milliliter). A set aliquot is then injected onto two dissimilar gas chromatograph columns. All of the wipe must be extracted and analyzed at one time. Splitting the wipe is not appropriate.

5.6 Classification of Field Samples for Shipment

The samples collected at the site will be transported according to either Department of Transportation (DOT) Hazardous Materials Regulations or International Air Transport Association (IATA) Dangerous Goods Regulations. Samples will be transported in a manner that will maintain their integrity, as well as protect against detrimental effects from sample breakage or leakage. The Roy F. Weston, Inc. Guidelines for Classifying Field Sample Shipments (Revision 4.0, 16 June 1994) will be followed whenever samples are shipped.

Samples collected will be classified as either "environmental" or "hazardous materials" samples. Environmental samples are generally those collected from streams, ponds, lakes, wells, and off-site soils which are not expected to be contaminated with hazardous materials. Hazardous materials samples are collected from on-site soils or water, and materials from drums, bulk storage tanks, obviously contaminated ponds, impoundments, lagoons, pools and leachates from hazardous waste sites.

Once samples are classified as environmental or hazardous materials, they will be screened, packaged, and shipped accordingly.

Environmental samples will be packaged and shipped according to the following procedures:

Environmental Samples

- Place properly-identified sample container in a sealed polyethylene bag.
- Place sample in a DOT-approved fiberboard container or picnic cooler lined with a large polyethylene bag.
- Pack container with enough noncombustible, absorbent, cushion material (e.g. vermiculite) to minimize the possibility of containers breaking, and to absorb any material which may leak from the sample jars.
- If there are multiple samples, make certain that there is sufficient cushioning material between the sample containers (each in its individual polyethylene bag) to prevent breakage due to dropping or severe shock.
- Seal large bag, add more absorbent if needed.

- Seal outside container with duct tape or strapping tape. Any cooler drain outlets should be taped shut.

The outside of the picnic cooler will be marked "Environmental Samples" and the appropriate sides of the container will be marked "This End Up" or with arrows accordingly. Place a proper address label on the outside of the package, no other labeling or shipping papers are required.

Hazardous Material Samples

Samples determined to be unknown hazardous materials will be classified through a process of professional judgement and elimination. Site background information, air monitoring equipment, and test strips will be used to classify samples of unknown materials to determine the proper hazard classification to be used during shipment.

Background ambient air and radiation readings will be taken for comparison purposes using the combustible gas indicator/oxygen meter (CGI), photoionization detector (PID) or flame ionization detector (FID), and Micro R radiation meter.

The samples will be screened for ionizing radiation by passing the Micro R meter over the sample material and noting the reading. This reading is then compared with that recorded during the ambient air background survey. Flammability will be determined by screening the headspace of the drum, container, or sample jar with the CGI and PID or FID, to determine if headspace readings are greater than background levels. Samples will also be checked for corrosivity and the presence of peroxides by testing the sample with pH and peroxide test strips.

Once radioactivity, flammability, corrosivity, and peroxides have been tested for, and professional judgement has been used to eliminate other hazard classification categories, the unknown samples will be classified and shipped as specified in the Roy F. Weston, Inc, Guidelines for Field Sample Shipments.

6.0 PROJECT ORGANIZATION AND RESPONSIBILITIES

U.S. EPA EPRB:

Paul Groulx	On-Scene Coordinator

TAT Members:

Edward Coffey	Sample collection and documentation
Stephen Amirault	Quality Control Monitor

The Quality Control Monitor will record quality assurance checks, any problems and corrective actions taken associated with the sampling and sampling plan. The Quality

Control Monitor will also be responsible for completeness and accuracy of the chain-of-custody record.

7.0 QUALITY ASSURANCE REQUIREMENTS

Per OSWER Section 2.7, the following QA requirements apply.

7.1 Screening Quality Assurance

The on-site screening/air monitoring activities will employ the following OSWER QA1 level requirements:

- Sample documentation.
- Instrument calibration/performance check.
- Determination of detection limit, if appropriate.

7.2 Sampling Quality Assurance

Sampling QA includes collecting one or more of the following quality control samples:

- Trip blanks for volatile organic analysis (VOA) if VOA samples are collected.
- Field duplicates if requested by the OSC.
- Matrix spike and matrix spike duplicate (MS/MSD): extra volume may be required for a matrix spike sample and a matrix spike duplicate sample at the rate of one MS/MSD pair per 20 samples collected of each matrix (i.e., soil, water, sludge).
- Laboratory Matrix Spike/duplicate (MS/Dupl): extra volume may be required for the laboratory to perform duplicate analysis and/or a matrix spike.

7.3 Laboratory Quality Assurance

The samples designated for Quick Turnaround analyses are generally those samples anticipated to contain mid-levels of the pollutant analytes of interest. These samples will be analyzed to determine definitive identification and quantitation of contaminants. Protocols for Quick Turnaround analysis include multiple standards, a matrix spike, and a laboratory blank.

8.0 DATA VALIDATION

A data quality review of the sample analyses will be conducted by NERL personnel according to *Quality Assurance/Quality Control Guidance for Removal Activities, Sampling QA/QC Plan and Data Validation Procedures,* OSWER Directive 9360.4-01, April 1990 - Interim Final, EPA/540/G-90/004 or by NERL intralaboratory data review procedures.

9.0 REFERENCES

Roy F. Weston, Inc. March 1992. *Technical Assistance Team Sampling Protocols* (Draft). Technical Assistance Team, Burlington, MA.

Roy F. Weston, Inc. May 1993. *Standard Operating Procedures for Preparing Site Sampling Plans for Site Investigations in Region I.* Technical Assistance Team, Burlington, MA.

U.S. Environmental Protection Agency. September 1994. *Region I Removal Program Branch Quality Assurance Project Plan.* New England Regional Laboratory, Lexington, MA.

U.S. Geological Survey, 1968. Nashua North, New Hampshire Quadrangle. 7.5 minute series (Topographical) Photorevised 1985.

U.S. Geological Survey, 1965. Nashua South, New Hampshire Quadrangle. 7.5 minute series (Topographical) Photorevised 1979.

ATTACHMENT I

CHAIN-OF-CUSTODY DOCUMENTATION

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

95154

CHAIN OF CUSTODY RECORD

JFK Federal Building, Rm. 2203
Boston, Massachusetts 02203

PROJ. NO.	PROJECT NAME
1321	JOHNS MANVILLE, NASHUA, N.H.

SAMPLERS: (Signature)
J. Amirante

1 OF 2

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	ASBESTOS	REMARKS
A-01	5/11/95	0925		X	DUST BAG ON FLOOR	1 QT. PLASTIC BAG	✓	EPA # 04314
A-02		0930			BOILER ROOM BRICKS		✓	04315
A-03		0933			DUST ON FLOOR OUTSIDE BOILER		✓	04316
A-04		0935			INSULATION ON FAN ON TOP OF OVEN		✓	04317
A-05		0937			INSULATION FROM VESSEL S-1		✓	04318
A-06		0940			BAGGED MATERIAL		✓	04319
A-07		0943			INSULATION ON BEAM NEAR PRESS		✓	04320
A-08		0945			PIPE INSUL. IN BASEMENT		✓	04321
A-09		0950			BASEMENT UNDER PRESS		✓	04322
A-10		0955			FLOOR OF BASEMENT		✓	04323
A-11		1025			PIPE ON WALL NEAR CAIR		✓	04324
A-12		1145			ENTRANCE OF 10 SANDERS		✓	04325
A-13		1150			PIT OF REMOVED VESSEL		✓	04326
A-14		1230			BEAM ON ROOF		✓	04327
A-15	✓	1235		✓	ROOF OUTSIDE BAG HOUSE	✓	✓	04328

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Stephen J. Amirante	5/12/95 0930				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
		Kathy Jack	5/12/95 930am	CC: GROLLX	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

1- 1900

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

(95154)

CHAIN OF CUSTODY RECORD

REGION 1
JFK Federal Building, Rm. 2203
Boston, Massachusetts 02203

PROJ. NO. 1321 | PROJECT NAME: JOHNS MANVILLE, NASHUA, N.H.

SAMPLERS: (Signature) S Annicante

STA NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	ASBESTOS	VOL-ID	PCB	VOA	REMARKS
A-16	5/11/95	~~0925~~ 1240		X	INSIDE BAG HOUSE	1 QT. PLASTIC BAG					EPA # 04329
A-17		1245			BEAM ABOVE HOPPER						04330
A-18		1255			PIPE OUTSIDE 40 BRIDGE ST.						04331
A-19		~~1455~~ 1445			GROUND OUTSIDE BUILDING						04332
A-20		1455			RIVER BED						04333
A-21		1520			BOARD INSIDE 10 SPINDERS						04334
D-01	5/11/95	1045		X	DRUM OF OIL	1 x 40 ML		X			04335
D-02		1055			UNKNOWN CONTAINER	3 x 40 ML			X		04336
D-03		1135			DRUM IN FRONT OF BUILD.	2 x 40 ML		X	X		04435
F-01		1100			OIL ON FLOOR IN BOILER ROOM	1 x 8 OZ.			X		04437 ~~36~~
F-02		1115			HARD MATERIAL ON FLOOR NEAR OIL	1 x 8 OZ 1 x 40 ML 1 x 8 OZ	X	X	X		04437
F-03		1140			FLOOR NEAR CAPACITOR	1 x 40 ML			X		04438
T-01		1440			TRANSFORMER AT 40 BRIDGE ST.	1 x 40 ML			X		04439
B-~~01~~		0900		X	TRIP BLANKS	3 x 40 ML				X	EPA # 04440

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Stephen Annicante	5/12/95 0930				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	
		Kathy Jarek	5/12/95 930am		

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT Johns-Manville STATE NH

COLLECTOR Coffey/ Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☒
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other ~~OIL~~ → (EC)	
Organics	☐	O&G	☐		
VOA's	☐				

METALS	Total	Dissolved
Cd ☐	Fe ☐	Pb ☐
Cu ☐	Hg ☐	Sn ☐
Cr (T) ☐	Mn ☐	Zn ☐
Cr (+6) ☐	Ni ☐	Other _____

EPA R-1 7500-30 *Unpreserved Sample

LAB CODE Nº 04335

PROJECT # - - 1 3 2 1

STATION # - - - 0 0 1

Y Y M M D D

DATE 9 5 0 5 1 1

COLLECTION TIME 1 0 4 5

SAMPLE TEMP °C - ☐☐

PROBE-D.O. (mg/l) ☐.☐

pH - S.U. ☐☐.☐

CONDUCTIVITY (micromhos/cm) ☐☐.☐

SALINITY (0/00) ☐☐.☐

TOTAL DEPTH (ft) ☐☐

SAMPLING DEPTH (ft) ☐☐.☐

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT Johns- Manville STATE N.H.

COLLECTOR Coffey/ Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other _____	
Organics	☐	O&G	☐		
VOA's	☒				

METALS	Total	Dissolved
Cd ☐	Fe ☐	Pb ☐
Cu ☐	Hg ☐	Sn ☐
Cr (T) ☐	Mn ☐	Zn ☐
*Cr (+6) ☐	Ni ☐	Other _____

EPA R-1 7500-30 *Unpreserved Sample

LAB CODE Nº 04336

PROJECT # - - 1 3 2 1

STATION # - - - 0 0 2

Y Y M M D D

DATE 9 5 0 5 1 1

COLLECTION TIME 1 0 5 5

SAMPLE TEMP °C ☐☐

PROBE-D.O. (mg/l) ☐.☐

pH - ~~S.U.~~ FIELD CHECK w/ pH PAPER ☒6.0

CONDUCTIVITY (micromhos/cm) ☐☐.☐

SALINITY (0/00) ☐☐.☐

TOTAL DEPTH (ft) ☐☐

SAMPLING DEPTH (ft) ☐☐.☐

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS-MANVILLE STATE N.H.

COLLECTOR Coffey/ AMIRAULT

FIELD OBSERVATIONS: CLEAR, OVERCAST, RAIN, SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti		NH_3		COD	
BOD		NO_{2+3}		PCB	X
TSS		TKN		X-Ray	
Turb		T-P		Other	OIL ID
Organics		O&G			
VOA's					

METALS		Total		Dissolved	
Cd		Fe		Pb	
Cu		Hg		Sn	
Cr (T)		Mn		Zn	
Cr (+6)		Ni		Other	

*Unpreserved Sample

EPA R-1 7500-30

LAB CODE Nº 04435

PROJECT # --1321

STATION # ---D03

Y Y M M D D

DATE 950511

COLLECTION TIME 1135

SAMPLE TEMP °C

PROBE-D.O. (mg/l) .

pH - S.U. .

CONDUCTIVITY (micromhos/cm) .

SALINITY (0/00) .

TOTAL DEPTH (ft)

SAMPLING DEPTH (ft) .

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS-MANVILLE STATE N.H.

COLLECTOR Coffey/ AMIRAULT

FIELD OBSERVATIONS: CLEAR, OVERCAST, RAIN, SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti		NH_3		COD	
BOD		NO_{2+3}		PCB	X
TSS		TKN		X-Ray	
Turb		T-P		Other	
Organics		O&G			
VOA's					

METALS		Total		Dissolved	
Cd		Fe		Pb	
Cu		Hg		Sn	
Cr (T)		Mn		Zn	
Cr (+6)		Ni		Other	

*Unpreserved Sample

LAB CODE Nº 04436

PROJECT # --1321

STATION # ---F01

Y Y M M D D

DATE 950511

COLLECTION TIME 1100

SAMPLE TEMP °C

PROBE-D.O. (mg/l) .

pH - S.U. .

CONDUCTIVITY (micromhos/cm) .

SALINITY (0/00) .

TOTAL DEPTH (ft)

SAMPLING DEPTH (ft) .

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT Joint Maneuver STATE NH

COLLECTOR Coffey / Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti		NH_3		COD	
BOD		NO_{2+3}		PCB	X
TSS		TKN		X-Ray	
Turb		T-P		Other	ASBESTOS OIL ID
Organics		O&G			
VOA's					

METALS		Total		Dissolved	
Cd		Fe		Pb	
Cu		Hg		Sn	
Cr (T)		Mn		Zn	
Cr (+6)		Ni		Other	

*Unpreserved Sample

EPA R-1 7500-30

LAB CODE № 04437

PROJECT # - - 1 3 2 1

STATION # - - (5) F 6 2

Y Y M M D D

DATE 9 5 0 5 1 1

COLLECTION TIME 1 1 1 5

SAMPLE TEMP °C

PROBE-D.O. (mg/l)

pH - S.U.

CONDUCTIVITY (micromhos/cm)

SALINITY (0/00)

TOTAL DEPTH (ft)

SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT Joint Maneuver STATE NH

COLLECTOR Coffey / Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti		NH_3		COD	
BOD		NO_{2+3}		PCB	X
TSS		TKN		X-Ray	
Turb		T-P		Other	
Organics		O&G			
VOA's					

METALS		Total		Dissolved	
Cd		Fe		Pb	
Cu		Hg		Sn	
Cr (T)		Mn		Zn	
Cr (+6)		Ni		Other	

*Unpreserved Sample

LAB CODE № 04438

PROJECT # - - 1 3 2 1

STATION # - - - F 0 3

Y Y M M D D

DATE 9 5 0 5 1 1

COLLECTION TIME 1 1 1 0 (5)

SAMPLE TEMP °C

PROBE-D.O. (mg/l)

pH - S.U.

CONDUCTIVITY (micromhos/cm)

SALINITY (0/00)

TOTAL DEPTH (ft)

SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT Johns Manville STATE NH

COLLECTOR Coffin / Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH3	☐	COD	☐
BOD	☐	NO2 + 3	☐	PCB	☒
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other	
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
Cr (+6)	☐	Ni	☐	Other	

EPA R-1 7500-30 *Unpreserved Sample

LAB CODE № 04439
PROJECT # -1321
STATION # -T01
Y Y M M D D
DATE 950511
COLLECTION TIME 1440
SAMPLE TEMP °C
PROBE-D.O. (mg/l)
pH - S.U.
CONDUCTIVITY (micromhos/cm)
SALINITY (0/00)
TOTAL DEPTH (ft)
SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT Johns - Manville STATE N.H

COLLECTOR Coffey / Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH3	☐	COD	☐
BOD	☐	NO2 + 3	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other	TRIP BLANKS
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
Cr (+6)	☐	Ni	☐	Other	

*Unpreserved Sample

LAB CODE № 04440
PROJECT # -1321
STATION # -B01
Y Y M M D D
DATE 950510
COLLECTION TIME 0800
SAMPLE TEMP °C
PROBE-D.O. (mg/l)
pH - S.U.
CONDUCTIVITY (micromhos/cm)
SALINITY (0/00)
TOTAL DEPTH (ft)
SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS MANVILLE STATE N.H.

COLLECTOR EC/SA

FIELD OBSERVATIONS: CLEAR, OVERCAST, ~~RAIN~~, SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other ASBESTOS	
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
Cr (+6)	☐	Ni	☐	Other	

EPA R-1 7500-30 *Unpreserved Sample

LAB CODE Nº 04314

PROJECT # [-][-][1][3][2][1]

STATION # [-][-][-][A][0][1]

Y Y M M D D

DATE [9][5][0][5][1][1]

COLLECTION TIME [0][9][2][5]

SAMPLE TEMP °C [ ][ ]

PROBE-D.O. (mg/l) [ ].

pH - S.U. [ ][ ].

CONDUCTIVITY (micromhos/cm) [ ][ ].

SALINITY (0/00) [ ][ ].

TOTAL DEPTH (ft) [ ][ ]

SAMPLING DEPTH (ft) [ ][ ].

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS-MANVILLE STATE N.H

COLLECTOR COFFEY/AMIRAULT

FIELD OBSERVATIONS: CLEAR, OVERCAST, RAIN, SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other ASBESTOS	
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
Cr (+6)	☐	Ni	☐	Other	

EPA R-1 7500-30 *Unpreserved Sample

LAB CODE Nº 04315

PROJECT # [-][-][1][3][2][1]

STATION # [-][-][-][A][0][2]

Y Y M M D D

DATE [9][5][0][5][1][1]

COLLECTION TIME [0][9][3][0]

SAMPLE TEMP °C [ ][ ]

PROBE-D.O. (mg/l) [ ].

pH - S.U. [ ][ ].

CONDUCTIVITY (micromhos/cm) [ ][ ].

SALINITY (0/00) [ ][ ].

TOTAL DEPTH (ft) [ ][ ]

SAMPLING DEPTH (ft) [ ][ ].

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS MANVILLE STATE NH

COLLECTOR Coffey/ AMINADUT

FIELD OBSERVATIONS: CLEAR, OVERCAST, RAIN, SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH3	☐	COD	☐
BOD	☐	NO2+3	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other ASBESTOS	
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
Cr (+6)	☐	Ni	☐	Other	

EPA R-1 7500-30

*Unpreserved Sample

LAB CODE Nº 04316

PROJECT # --1321

STATION # ---A03

Y Y M M D D

DATE 950511

COLLECTION TIME 0933

SAMPLE TEMP °C

PROBE-D.O. (mg/l)

pH - S.U.

CONDUCTIVITY (micromhos/cm)

SALINITY (0/00)

TOTAL DEPTH (ft)

SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS MANVILLE STATE NH.

COLLECTOR Coffey/ AMINADUT

FIELD OBSERVATIONS: CLEAR, OVERCAST, RAIN, SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH3	☐	COD	☐
BOD	☐	NO2+3	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other ASBESTOS	
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
Cr (+6)	☐	Ni	☐	Other	

*Unpreserved Sample

LAB CODE Nº 04317

PROJECT # --1321

STATION # --A04

Y Y M M D D

DATE 950511

COLLECTION TIME 0935

SAMPLE TEMP °C

PROBE-D.O. (mg/l)

pH - S.U.

CONDUCTIVITY (micromhos/cm)

SALINITY (0/00)

TOTAL DEPTH (ft)

SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT Johns Manville STATE NH

COLLECTOR Coffey/ Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other Asbestos	
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
Cr (+6)	☐	Ni	☐	Other	

EPA R-1 7500-30

*Unpreserved Sample

LAB CODE Nº 04318

PROJECT # -1321

STATION # -405

Y Y M M D D

DATE 950521

COLLECTION TIME 0937

SAMPLE TEMP °C

PROBE-D.O. (mg/l)

pH - S.U.

CONDUCTIVITY (micromhos/cm)

SALINITY (0/00)

TOTAL DEPTH (ft)

SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT Johns Manville STATE N. H.

COLLECTOR Coffey/ Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other Asbestos	
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
Cr (+6)	☐	Ni	☐	Other	

*Unpreserved Sample

LAB CODE Nº 04319

PROJECT # -1321

STATION # -406

Y Y M M D D

DATE 950511

COLLECTION TIME 0940

SAMPLE TEMP °C

PROBE-D.O. (mg/l)

pH - S.U.

CONDUCTIVITY (micromhos/cm)

SALINITY (0/00)

TOTAL DEPTH (ft)

SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT John Manville STATE N.H.

COLLECTOR Gilles/ Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, RAIN, SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other	ASBESTOS
Organics	☐	O&G	☐		
VOA's	☐				

METALS	Total	Dissolved
Cd ☐	Fe ☐	Pb ☐
Cu ☐	Hg ☐	Sn ☐
Cr (T) ☐	Mn ☐	Zn ☐
Cr (+6) ☐	Ni ☐	Other _____

EPA R-1 7500-30 *Unpreserved Sample

LAB CODE Nº 04320

PROJECT # -1321

STATION # --A07

Y Y M M D D

DATE 950511

COLLECTION TIME 0943

SAMPLE TEMP °C ☐☐

PROBE-D.O. (mg/l) ☐.

pH - S.U. ☐☐.

CONDUCTIVITY (micromhos/cm) ☐☐.

SALINITY (0/00) ☐☐.

TOTAL DEPTH (ft) ☐☐

SAMPLING DEPTH (ft) ☐☐.

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT John's Manville STATE N.H.

COLLECTOR Gilles/ Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, RAIN, SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other	ASBESTOS
Organics	☐	O&G	☐		
VOA's	☐				

METALS	Total	Dissolved
Cd ☐	Fe ☐	Pb ☐
Cu ☐	Hg ☐	Sn ☐
Cr (T) ☐	Mn ☐	Zn ☐
Cr (+6) ☐	Ni ☐	Other _____

EPA R-1 7500-30 *Unpreserved Sample

LAB CODE Nº 0432

PROJECT # -1321

STATION # --408

Y Y M M D D

DATE 950511

COLLECTION TIME 0941

SAMPLE TEMP °C ☐☐

PROBE-D.O. (mg/l) ☐

pH - S.U. ☐☐.

CONDUCTIVITY (micromhos/cm) ☐☐

SALINITY (0/00) ☐☐

TOTAL DEPTH (ft) ☐☐

SAMPLING DEPTH (ft) ☐☐.

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS-MANVILLE STATE NH

COLLECTOR Coffey/ AMIRAULT

FIELD OBSERVATIONS: CLEAR, OVERCAST, RAIN, SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other ASBESTOS	
Organics	☐	O&G	☐		
VOA's	☐				

METALS	Total	Dissolved
Cd ☐	Fe ☐	Pb ☐
Cu ☐	Hg ☐	Sn ☐
Cr (T) ☐	Mn ☐	Zn ☐
Cr (+6) ☐	Ni ☐	Other _____

EPA R-1 7500-30 *Unpreserved Sample

LAB CODE Nº 04322
PROJECT # - - 1 3 2 1
STATION # - - - A 0 9
Y Y M M D D
DATE 9 5 0 5 1 1
COLLECTION TIME 0 9 5 0
SAMPLE TEMP °C ☐☐
PROBE-D.O. (mg/l) ☐.☐
pH - S.U. ☐☐.☐
CONDUCTIVITY (micromhos/cm) ☐☐.☐
SALINITY (0/00) ☐☐.☐
TOTAL DEPTH (ft) ☐☐
SAMPLING DEPTH (ft) ☐☐.☐

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS-MANVILLE STATE NH

COLLECTOR Coffey/AMIRAULT

FIELD OBSERVATIONS: CLEAR, OVERCAST, RAIN, SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other ASBESTOS	
Organics	☐	O&G	☐		
VOA's	☐				

METALS	Total	Dissolved
Cd ☐	Fe ☐	Pb ☐
Cu ☐	Hg ☐	Sn ☐
Cr (T) ☐	Mn ☐	Zn ☐
Cr (+6) ☐	Ni ☐	Other _____

EPA R-1 7500-30 *Unpreserved Sample

LAB CODE Nº 04323
PROJECT # - - 1 3 2 1
STATION # - - - A 1 0
Y Y M M D D
DATE 9 5 0 5 1 1
COLLECTION TIME 0 9 5 5
SAMPLE TEMP °C ☐☐
PROBE-D.O. (mg/l) ☐.☐
pH - S.U. ☐☐.☐
CONDUCTIVITY (micromhos/cm) ☐☐.☐
SALINITY (0/00) ☐☐.☐
TOTAL DEPTH (ft) ☐☐
SAMPLING DEPTH (ft) ☐☐.☐

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT John Manville STATE NH

COLLECTOR Coffey/Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, RAIN, SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other Asbestos	
Organics	☐	O&G	☐		
VOA's	☐				

METALS	Total		Dissolved	
Cd	☐	Fe	☐	Pb ☐
Cu	☐	Hg	☐	Sn ☐
Cr (T)	☐	Mn	☐	Zn ☐
Cr (+6)	☐	Ni	☐	Other ____

EPA R-1 7500-30 *Unpreserved Sample

LAB CODE Nº 04324
PROJECT # --1321
STATION # ---A11
Y Y M M D D
DATE 950511
COLLECTION TIME 1025
SAMPLE TEMP °C
PROBE-D.O. (mg/l)
pH - S.U.
CONDUCTIVITY (micromhos/cm)
SALINITY (0/00)
TOTAL DEPTH (ft)
SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT John - Manville STATE NH.

COLLECTOR Coffey/Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, RAIN, SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other Asbestos	
Organics	☐	O&G	☐		
VOA's	☐				

METALS	Total		Dissolved	
Cd	☐	Fe	☐	Pb ☐
Cu	☐	Hg	☐	Sn ☐
Cr (T)	☐	Mn	☐	Zn ☐
Cr (+6)	☐	Ni	☐	Other ____

*Unpreserved Sample

LAB CODE Nº 04325
PROJECT # --1321
STATION # ---A12
Y Y M M D D
DATE 950511
COLLECTION TIME 1145
SAMPLE TEMP °C
PROBE-D.O. (mg/l)
pH - S.U.
CONDUCTIVITY (micromhos/cm)
SALINITY (0/00)
TOTAL DEPTH (ft)
SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT Johns - Manville STATE N.H.

COLLECTOR Coffey/ Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH3	☐	COD	☐
BOD	☐	NO2 + 3	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other Asbestos	
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
*Cr (+6)	☐	Ni	☐	Other	

*Unpreserved Sample

EPA R-1 7500-30

LAB CODE № 04326
PROJECT # --1321
STATION # --A13
Y Y M M D D
DATE 950511
COLLECTION TIME 1150
SAMPLE TEMP °C
PROBE-D.O. (mg/l)
pH - S.U.
CONDUCTIVITY (micromhos/cm)
SALINITY (0/00)
TOTAL DEPTH (ft)
SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT Johns- Manville STATE N.H.

COLLECTOR Coffey/ Amirault

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH3	☐	COD	☐
BOD	☐	NO2 + 3	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other Asbestos	
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
*Cr (+6)	☐	Ni	☐	Other	

*Unpreserved Sample

EPA R-1 7500-30

LAB CODE № 04327
PROJECT # --1321
STATION # --A14
Y Y M M D D
DATE 950511
COLLECTION TIME 1250
SAMPLE TEMP °C
PROBE-D.O. (mg/l)
pH - S.U.
CONDUCTIVITY (micromhos/cm)
SALINITY (0/00)
TOTAL DEPTH (ft)
SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS - MANSVILLE STATE NH

COLLECTOR COFFEY/ AMIRAULT

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other ASBESTOS	
Organics	☐	O&G	☐		
VOA's	☐				

METALS	Total		Dissolved	
Cd	☐	Fe	☐	Pb ☐
Cu	☐	Hg	☐	Sn ☐
Cr (T)	☐	Mn	☐	Zn ☐
*Cr (+6)	☐	Ni	☐	Other

*Unpreserved Sample

EPA R-1 7500-30

LAB CODE Nº 04328

PROJECT # - - 1 3 2 1

STATION # - - - A 1 5

Y Y M M D D

DATE 9 5 0 5 1 1

COLLECTION TIME 1 2 3 5

SAMPLE TEMP °C ☐☐

PROBE-D.O. (mg/l) ☐.☐

pH - S.U. ☐☐.☐

CONDUCTIVITY (micromhos/cm) ☐☐.☐

SALINITY (0/00) ☐☐.☐

TOTAL DEPTH (ft) ☐☐

SAMPLING DEPTH (ft) ☐☐.☐

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS MANVILLE STATE NH

COLLECTOR COFFEY/ AMIRAULT

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other ASBESTOS	
Organics	☐	O&G	☐		
VOA's	☐				

METALS	Total		Dissolved	
Cd	☐	Fe	☐	Pb ☐
Cu	☐	Hg	☐	Sn ☐
Cr (T)	☐	Mn	☐	Zn ☐
*Cr (+6)	☐	Ni	☐	Other

*Unpreserved Sample

EPA R-1 7500-30

LAB CODE Nº 04329

PROJECT # - - 1 3 2 1

STATION # - - - A 1 6

Y Y M M D D

DATE 9 5 0 5 1 1

COLLECTION TIME 1 2 4 0

SAMPLE TEMP °C ☐☐

PROBE-D.O. (mg/l) ☐.☐

pH - S.U. ☐☐.☐

CONDUCTIVITY (micromhos/cm) ☐☐.☐

SALINITY (0/00) ☐☐.☐

TOTAL DEPTH (ft) ☐☐

SAMPLING DEPTH (ft) ☐☐.☐

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS-MANVILLE STATE NH

COLLECTOR COFFEY/AMIRAULT

FIELD OBSERVATIONS: CLEAR, OVERCAST, PARTIAL CLOUDS, RAIN, SNOW, FOG (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other ASBESTOS	
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
Cr (+6)	☐	Ni	☐	Other	

*Unpreserved Sample

EPA R-1 7500-30

LAB CODE Nº 04330
PROJECT # 1321
STATION # A17
DATE (YYMMDD) 950511
COLLECTION TIME 1245
SAMPLE TEMP °C
PROBE-D.O. (mg/l)
pH - S.U.
CONDUCTIVITY (micromhos/cm)
SALINITY (0/00)
TOTAL DEPTH (ft)
SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS-MANVILLE STATE NH

COLLECTOR COFFEY/AMIRAULT

FIELD OBSERVATIONS: CLEAR, OVERCAST, PARTIAL CLOUDS, RAIN, SNOW, FOG (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other ASBESTOS	
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
Cr (+6)	☐	Ni	☐	Other	

*Unpreserved Sample

LAB CODE Nº 04331
PROJECT # 1321
STATION # A18
DATE (YYMMDD) 950511
COLLECTION TIME 1255
SAMPLE TEMP °C
PROBE-D.O. (mg/l)
pH - S.U.
CONDUCTIVITY (micromhos/cm)
SALINITY (0/00)
TOTAL DEPTH (ft)
SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS-MANVILLE STATE NH

COLLECTOR COFFEY/ AMIRAULT

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other ASBESTOS	
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
Cr (+6)	☐	Ni	☐	Other	

*Unpreserved Sample

LAB CODE Nº 04332

PROJECT # -13211

STATION # -A19

Y Y M M D D

DATE 950511

COLLECTION TIME 1445

SAMPLE TEMP °C

PROBE-D.O. (mg/l)

pH - S.U.

CONDUCTIVITY (micromhos/cm)

SALINITY (0/00)

TOTAL DEPTH (ft)

SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT JOHNS-MANVILLE STATE NH

COLLECTOR COFFEY/ AMIRAULT

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other ASBESTOS	
Organics	☐	O&G	☐		
VOA's	☐				

METALS		Total		Dissolved	
Cd	☐	Fe	☐	Pb	☐
Cu	☐	Hg	☐	Sn	☐
Cr (T)	☐	Mn	☐	Zn	☐
Cr (+6)	☐	Ni	☐	Other	

*Unpreserved Sample

LAB CODE Nº 04333

PROJECT # -13211

STATION # -A20

Y Y M M D D

DATE 950511

COLLECTION TIME 1455

SAMPLE TEMP °C

PROBE-D.O. (mg/l)

pH - S.U.

CONDUCTIVITY (micromhos/cm)

SALINITY (0/00)

TOTAL DEPTH (ft)

SAMPLING DEPTH (ft)

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION I

PROJECT Johns - Manville STATE NH

COLLECTOR Groux

FIELD OBSERVATIONS: CLEAR, OVERCAST, (RAIN), SNOW, FOG
PARTIAL CLOUDS (CIRCLE ONE)

AIR TEMP °C TIDE: HIGH, EBB, LOW, FLOOD

LAB CODE Nº 04334

PROJECT # --1321

STATION # --A21

Y Y M M D D

DATE 950511

COLLECTION TIME 1520

SAMPLE TEMP °C

PROBE-D.O. (mg/l) .

pH - S.U. .

CONDUCTIVITY (micromhos/cm) .

SALINITY (0/00) .

TOTAL DEPTH (ft)

SAMPLING DEPTH (ft) .

PARAMETERS (CHECK APPROPRIATE)

Bacti	☐	NH_3	☐	COD	☐
BOD	☐	NO_{2+3}	☐	PCB	☐
TSS	☐	TKN	☐	X-Ray	☐
Turb	☐	T-P	☐	Other Asbestos	
Organics	☐	O&G	☐		
VOA's	☐				

METALS	Total	Dissolved
Cd ☐	Fe ☐	Pb ☐
Cu ☐	Hg ☐	Sn ☐
Cr (T) ☐	Mn ☐	Zn ☐
Cr (+6) ☐	Ni ☐	Other _____

EPA R-1 7500-30

*Unpreserved Sample

APPENDIX D

Asbestos Sampling Data

ASBESTOS DATA
JOHNS MANVILLE COMPANY SITE
NASUA, NEW HAMPSHIRE

All asbestos content results in percentage of sample volume

Laboratory Site Number:	94007	94007	94007	94007	94007
Station Number:	A 01	A 02	A 03	A 04	A 05
Location:	Dust bag on floor	Boiler room bricks	Dust on floor	Insulation on fan	Insulation on vessel S-1
Depth:	Surface	Surface	Surface	Surface	Surface
Matrix:	Soil	Soil	Soil	Soil	Soil
Date Sampled:	05/11/95	05/11/95	05/11/95	05/11/95	05/11/95
Laboratory ID Number:	04314	04315	04316	04317	04318
Sample Appearance	Fine white powder, non- fiberous.	White brick material consisting of mineral particles (small stones) and white building material.	Fine grey powder with some wood slivers and paint and mineral particles mixed in.	1/2" inch greyish white board material with protruding white curly fibers and straight glass fibers.	White insulation material w/ loose clumps.
Asbestos Present: Type and Percent	None found	None found	Chrysotile: trace	Chrysotile: 20 – 25 %	Amosite: 35 – 40%
Other Fibrous Materials Present – Type and Percent	None found	None found	Cellulose: trace	Mineral wool: 20 – 25%	None found
Non-Fibrous Materials Present	None found	None found	Tar mineral particles	Binder	Binder
Percent Total Asbestos Present in Sample	0 %	0 %	< 1 %	20 – 25 %	35 -40 %
Remarks	Isotropic Material		Chrysotile fibers found in a tar piece		

NOTE: All samples screened for asbestos at EPA NERL using Polarized Light Microscopy (with dispersion staining) method

ASBESTOS DATA
JOHNS MANVILLE COMPANY SITE
NASUA, NEW HAMPSHIRE

All asbestos content results in percentage of sample volume

Laboratory Site Number:	94007	94007	94007	94007	94007
Station Number:	A 06	A 07	A 08	A 09	A 10
Location	Bagged Material	Insul. on beam near press.	Pipe insulation in basment	Basment under press	Floor of basment
Depth:	Surface	Surface	Surface	Surface	Surface
Matrix:	Soil	Soil	Soil	Soil	Soil
Date Sampled:	05/11/95	05/11/95	05/11/95	05/11/95	05/11/95
Laboratory ID Number:	04319	04320	04321	04322	04323
Sample Appearance	Grey, white fibers in clumps	Grey, white fibers in clumps	White fiberous clumps	White clump with matted fibers	Grey clump with matted fibers
Asbestos Present: Type and Percent	Chrysotile: Trace	None found	Chrysotile: 70 – 80 %	None found	None found
Other Fibrous Materials Present – Type and Percent	Cellulose: 70 – 80 % Mineral Wool	Cellulose: 70 – 80 %	None found	Cellulose: 50 – 80 %	Cellulose: 70 – 80 %
Non–Fibrous Materials Present	Binder, mineral particles	Binder, mineral particles	Binder	Binder	Binder
Percent Total Asbestos Present in Sample	<1 %	0 %	70 – 80 %	0 %	0 %
Remarks					

NOTE: All samples screened for asbestos at EPA NERL using Polarized Light Microscopy (with dispersion staining) method

ASBESTOS DATA
JOHNS MANVILLE COMPANY SITE
NASUA, NEW HAMPSHIRE

All asbestos content results in percentage of sample volume

Laboratory Site Number:	94007	94007	94007	94007	94007
Station Number:	A 11	A 12	A 13	A 14	A 15
Location	Pipe on wall near car	Entrance of 10 Sanders St.	Pit of removed vessel	Beam on roof	Roof outside baghouse
Depth:	Surface	Surface	Surface	Surface	Surface
Matrix:	Soil	Soil	Soil	Soil	Soil
Date Sampled:	05/11/95	05/11/95	05/11/95	05/11/95	05/11/95
Laboratory ID Number:	04324	04325	04326	04327	04328
Sample Appearance	Whitish (some grey)	Grey hard matrix with fibers.	White straight matted fibers.	Whitish – grey material filled with brown fibers.	Fine dirt with plant material mixed in.
Asbestos Present: Type and Percent	None found	None found	None found	None found	None found
Other Fibrous Materials Present – Type and Percent	Cellulose: 70 – 80 %	Other: Unidentified non–asbestos fibers	Mineral Wool: 95 – 99 %	Cellulose: 50 – 60 %	Cellulose: 40 – 50 % Mineral Wool: Trace
Non–Fibrous Materials Present	Mineral particles, binder	Binder	Mineral particles, binder	Mineral particles, binder	Mineral particles
Percent Total Asbestos Present in Sample	0 %	0 %	0 %	0 %	0 %
Remarks		Negative elongation fiber			

NOTE: All samples screened for asbestos at EPA NERL using Polarized Light Microscopy (with dispersion staining) method

ASBESTOS DATA
JOHNS MANVILLE COMPANY SITE
NASUA, NEW HAMPSHIRE

All asbestos content results in percentage of sample volume

Laboratory Site Number:	94007	94007	94007	94007	94007
Station Number:	A 16	A 17	A 18	A 19	A 20
Location	Inside Baghouse	Beam above hopper	Pipe outside 40 Bridge St.	Ground outside building	River bed
Depth:	Surface	Surface	Surface	Surface	Surface
Matrix:	Soil	Soil	Soil	Soil	Soil
Date Sampled:	05/11/95	05/11/95	05/11/95	05/11/95	05/11/95
Laboratory ID Number:	04329	04330	04331	04332	04333
Sample Appearance	Grey fiber with some traces of fiber within.	Grey and white hard substance with protruding fibers.	White, plaster like material.	Grey, soil like material with white fibers and straight rods within.	Grey, green, tan clump of sandstone, fibers and soil.
Asbestos Present: Type and Percent	None found	None found	None found	None found	Chrysotile: 10 – 15%
Other Fibrous Materials Present – Type and Percent	Cellulose: 1 %	Cellulose: 40 – 50 %	None found	Cellulose: 5 %	Cellulose: 2– 5 % Mineral Wool: Trace Other: Unidentified straight long fiber 10 – 15 %
Non–Fibrous Materials Present	Binder like powder.	Mineral particles, binder.	None found	Glass rods, mineral particles	Sand stone, mineral particles.
Percent Total Asbestos Present in Sample	0 %	0 %	0 %	0 %	10 – 15 %
Remarks					

NOTE: All samples screened for asbestos at EPA NERL using Polarized Light Microscopy (with dispersion staining) method.

ASBESTOS DATA
JOHNS MANVILLE COMPANY SITE
NASUA, NEW HAMPSHIRE

All asbestos content results in percentage of sample volume

Laboratory Site Number:	94007	94007			
Station Number:	A 21	F 02			
Location	Board inside 10 Sanders St	Floor material near oven			
Depth:	Surface	Surface			
Matrix:	Soil	Soil			
Date Sampled:	05/11/95	05/11/95			
Laboratory ID Number:	04334	04337			
Sample Appearance	Whitish grey cement like piece with white fiber bundles protruding.	Black tar with brown flakey material on surface with some fiber bundles.			
Asbestos Present: Type and Percent	Chrysotile: 10 – 15 %	Chrysotile: 2 – 5 %			
Other Fibrous Materials Present – Type and Percent	None found	None found			
Non–Fibrous Materials Present	Cement like matrix	Mineral particles, tar matrix.			
Percent Total Asbestos Present in Sample	10 – 15 %	2 – 5 %			
Remarks					

NOTE: All samples screened for asbestos at EPA NERL using Polarized Light Microscopy (with dispersion staining) method

APPENDIX E

Polychlorinated Biphenyls (PCBs) Sampling Data

PCB RESULTS DATA
JOHNS MANVILLE COMPANY SITE
NASHUA, NEW HAMPSHIRE

All results in ug/g (ppm)

EPA Sample Number:	04335	04435	04436	04437	04438	04439	NH
Station Number:	D – 01	D – 03	F – 01	F – 02	F – 03	T – 01	T – 01
Depth:							
Matrix:	Oil	Oil	Oil	Oil	Oil	Oil	Oil
Date Sampled:	05/11/95	05/11/95	05/11/95	05/11/95	05/11/95	05/11/95	04/19/95
Aroclor–1016	20 U	10 U	20 U	10 U	200,000 U	200,000 U	10,000 U
Aroclor–1221	20 U	10 U	20 U	10 U	200,000 U	200,000 U	10,000 U
Aroclor–1232	20 U	10 U	20 U	10 U	200,000 U	200,000 U	10,000 U
Aroclor–1242	20 U	10 U	20 U	10 U	200,000 U	200,000 U	9,000 (est.)
Aroclor–1248	20 U	10 U	20 U	10 U	200,000 U	200,000 U	10,000 U
Aroclor–1254	20 U	10 U	20 U	10 U	730,000	200,000 U	26,000
Aroclor–1260	20 U	10 U	20 U	10 U	200,000 U	300,000	450,000
Aroclor–1262	20 U	10 U	20 U	10 U	200,000 U	200,000 U	NA
Aroclor–1268	20 U	10 U	20 U	10 U	200,000 U	200,000 U	NA
Dilution Factor:	1.5	1.6	0.98	0.96	16,000	6,600	

NOTE:
U = The material was analyzed for, but not detected. The associated numerical value is the adjusted detection limit due to blank contamination.
NA = Not analyzed.
est. = Estimated result

All samples analyzed by EPA New England Region Laboratory, Lexington, Massachusetts. Station T – 01 was also analyzed by New Hampshire Department of Environmental Services (NH DES) and results are shown in column marked NH.
All samples collected by Roy F. Weston, Inc., Technical Assistance Team (TAT), Burlington, Massachusetts, except station T–01 results in column marked NH, collected by NH DES.

APPENDIX F

Oil Identification Sampling Results

OIL IDENTIFICATION RESULTS DATA
JOHNS MANVILLE COMPANY SITE
NASHUA, NEW HAMPSHIRE

EPA Sample Number:	04335	04437	
Station Number:	D – 01	F – 01	
Depth:			
Matrix:	Oil	Oil	
Date Sampled:	05/11/95	05/11/95	
Comparison Result	No Match	Indeterminate Match with 40 W motor oil.	

NOTE:
Match = Identical data or data showing minor differences attributed to weathering with chromatograms of known oil standards.
Probable Match = Similar data showing moderate differences attributed to weathering and/or contamination.
Indeterminate = Data showing excessive differences that might be attributed to weathering and/or contamination or might be attributed to a similar oil from a different source.

All samples analyzed by EPA New England Region Laboratory, Lexington, Massachusetts.
All samples collected by Roy F. Weston, Inc., Technical Assistance Team (TAT), Burlington, Massachusetts

APPENDIX G

Volatile Organic Compound Sampling Results

VOLATILE ORGANIC COMPOUNDS RESULTS DATA
JOHNS MANVILLE COMPANY SITE
NASHUA, NEW HAMPSHIRE

All results in ug/gm (ppm)

EPA Sample Number:	04336				
Station Number:	D-02				
Depth:					
Matrix:	Drum				Reporting
Date Sampled:	05/11/95				Level
Chloromethane	ND				9.68
Bromomethane	ND				4.84
Vinyl Chloride	ND				4.84
Chloroethane	ND				4.84
Methylene Chloride	ND				4.84
Trichlorofluoromethane	ND				4.84
1,1-Dichloroethylene	ND				4.84
1,1-Dichloroethane	ND				4.84
1,2-Dichloroethylene isomers	ND				4.84
Chloroform	ND				4.84
1,2-Dichloroethane	ND				4.84
1,1,1-Trichloroethane	ND				4.84
Carbon Tetrachloride	ND				4.84
Bromodichloromethane	ND				4.84
1,2-Dichloropropane	ND				4.84
t-1,3-Dichloropropene	ND				4.84
Trichloroethylene	ND				4.84
Dibromochloromethane	ND				4.84
c-1-3-Dichloropropene	ND				4.84
1,1,2-Trichloroethane	ND				4.84
Benzene	ND				4.84
2-Chloroethylvinyl ether	ND				19.36
Bromoform	ND				4.84
Tetrachloroethylene	ND				4.84
1,1,2,2-Tetrachloroethane	ND				4.84
Toluene	ND				4.84
Chlorobenzene	ND				4.84
Ethylbenzene	ND				4.84
Acrolein	ND				145.2
Acrylonitrile	ND				145.2
Dichlorobenzene isomers	ND				9.68
1,1,2-Trichloro-1,2,2-trifluoroethane	ND				4.84
Acetone	ND				193.60
Carbon Disulfide	ND				14.52
2-Butanone (MEK)	ND				484.00
Vinyl Acetate	ND				48.40
2-Hexanone	ND				4.84
4-Methyl-2-Pentanone (MEK)	ND				14.52
Styrene	ND				4.84
Xylene (Total)	ND				9.68
1,2-dibromoethane (EDB)	ND				4.84
Tetrahydrofluran	ND				48.4
Ethyl ether	ND				14.52

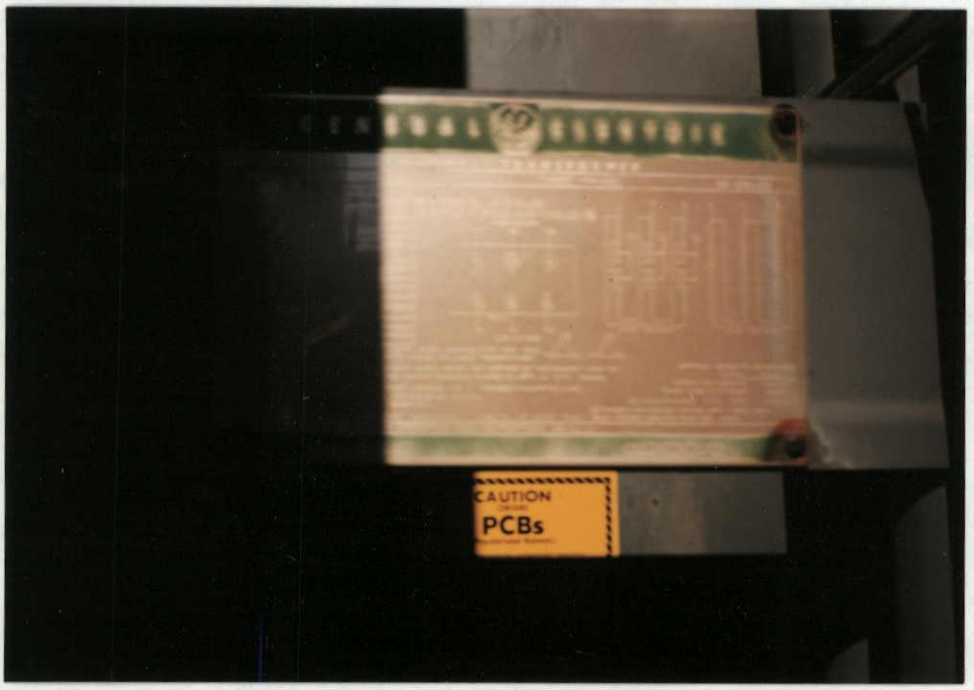
ND – The material was analyzed for, but not detected. No qualification was applied to the non-detected result.

All samples analyzed by EPA New England Region Laboratory, Lexington, Massachusetts
All samples collected by Roy F. Weston, Inc., Technical Assistance Team (TAT), Burlington, Massachusetts

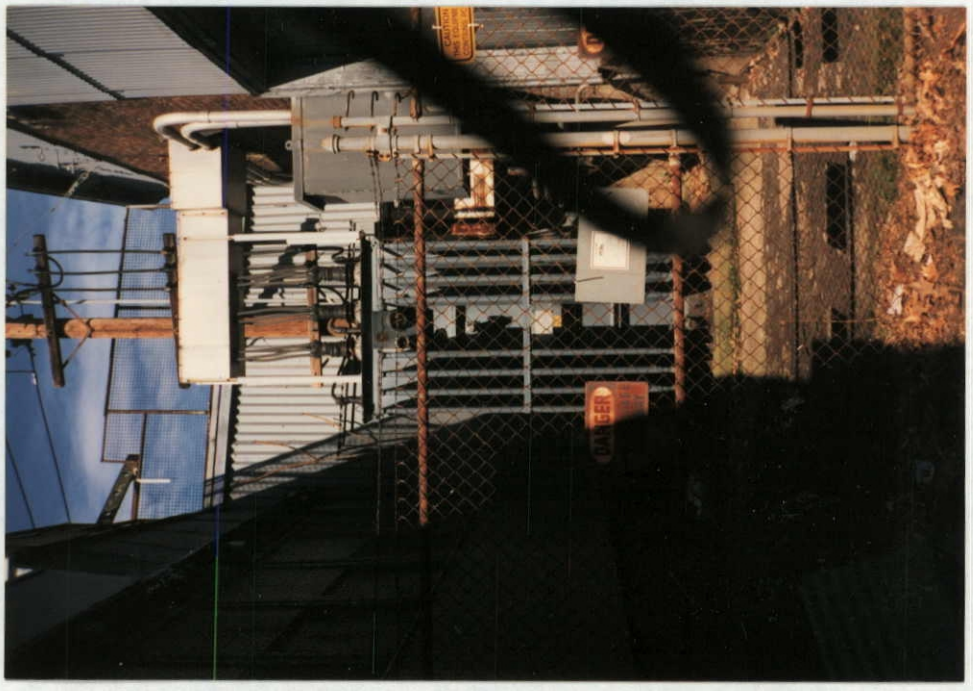
APPENDIX H

Photodocumentation Log

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE



SCENE: NAMEPLATE OF TRANSFORMER OUTSIDE OF 40 BRIDGE STREET (OUT OF FOCUS).
FRAME NUMBER: 1 **DATE:** 05/03/95 **TIME:** 0930 **SKY CONDITION:** SUNNY
PHOTO BY: S. AMIRAULT **WITNESS(ES):** P. GROULX
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843



SCENE: TRANSFORMER ENCLOSURE OUTSIDE OF 40 BRIDGE STREET.
FRAME NUMBER: 2 **DATE:** 05/03/95 **TIME:** 0935 **SKY CONDITION:** SUNNY
PHOTO BY: S. AMIRAULT **WITNESS(ES):** P. GROULX
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: TRANSFORMER, SAMPLE STATION T - 01.
FRAME NUMBER: 20 **DATE:** 05/11/95 **TIME:** 1450 **SKY CONDITION:** CLOUDY
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

SCENE: GROUND ON WESTERN SIDE OF BUILDING, SAMPLE STATION A - 19.
FRAME NUMBER: 21 **DATE:** 05/11/95 **TIME:** 1457 **SKY CONDITION:** CLOUDY
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: VANDALIZED AND BREACHED SECTION OF FENCE IN REAR OF SITE.
FRAME NUMBER: 22 **DATE:** 05/11/95 **TIME:** 1510 **SKY CONDITION:** CLOUDY
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

SCENE: SUSPECTED ACM IN BANK OF NASHUA RIVER, STATION A-20
FRAME NUMBER: 23 **DATE:** 05/11/95 **TIME:** 1516 **SKY CONDITION:** CLOUDY
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: SEALED OFF FORMER OUTFALL PIPE.
FRAME NUMBER: 25 **DATE:** 05/11/95 **TIME:** 1518 **SKY CONDITION:** CLOUDY
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

SCENE: OUTFALL PIPE AREA, FROM UPSTREAM OF RIVER.
FRAME NUMBER: 24 **DATE:** 05/11/95 **TIME:** 1518 **SKY CONDITION:** CLOUDY
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: PAINTS AND THINNERS LOCATED INSIDE 40 BRIDGE STREET.
FRAME NUMBER: 1 **DATE:** 05/11/95 **TIME:** 1426 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

TOP

SCENE: PAINTS AND THINNERS LOCATED INSIDE 40 BRIDGE STREET.
FRAME NUMBER: 11 **DATE:** 05/03/95 **TIME:** 1035 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

TOP

SCENE: PAINTS AND THINNERS LOCATED INSIDE 40 BRIDGE STREET.
FRAME NUMBER: 9 **DATE:** 05/03/95 **TIME:** 1035 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

TOP

SCENE: PAINTS AND THINNERS LOCATED INSIDE 40 BRIDGE STREET.
FRAME NUMBER: 10 **DATE:** 05/03/95 **TIME:** 1035 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: 5-GALLON PAILS (ONE ACETONE) LOCATED INSIDE 40 BRIDGE STREET.
FRAME NUMBER: 8 **DATE:** 05/03/95 **TIME:** 1030 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

SCENE: DRUM OF UNKNOWN LIQUID (OPEN TOP), SAMPLE STATION D - 03.
FRAME NUMBER: 13 **DATE:** 05/11/95 **TIME:** 1435 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: COMPRESSED GAS CYLINDER LOCATED INSIDE 40 BRIDGE STREET.
FRAME NUMBER: 3 **DATE:** 05/11/95 **TIME:** 1424 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

SCENE: DRUM WITH UNKNOWN LIQUID, SAMPLE STATION D-01
FRAME NUMBER: 2 **DATE:** 05/11/95 **TIME:** 1424 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: BAGHOUSE DUST BAG LOCATED INSIDE 40 BRIDGE STREET.
FRAME NUMBER: 12 **DATE:** 05/03/95 **TIME:** 1040 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

SCENE: 5-GALLON CONTAINER OF UNKNOWNS, SAMPLE STATION D - 02.
FRAME NUMBER: 4 **DATE:** 05/11/95 **TIME:** 1425 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: 5-GALLON PAIL (FLAMMABLE) AND LARGE 60-GALLON CONTAINER (UNKNOWN)
FRAME NUMBER: 13 **DATE:** 05/03/95 **TIME:** 1045 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

SCENE: 5-GALLON PAILS LOCATED INSIDE 40 BRIDGE STREET.
FRAME NUMBER: 14 **DATE:** 05/03/95 **TIME:** 1050 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

SCENE: 30-GALLON DRUM LOCATED INSIDE 40 BRIDGE STREET.
FRAME NUMBER: 15 **DATE:** 05/03/95 **TIME:** 1050 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

SCENE: TWO LEAKING CAPACITORS LOCATED INSIDE 40 BRIDGE STREET.
FRAME NUMBER: 16 **DATE:** 05/03/95 **TIME:** 1055 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: LEAKING CAPACITORS ON FLOOR, SAMPLE STATION F - 03.
FRAME NUMBER: 14 **DATE:** 05/11/95 **TIME:** 1436 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

SCENE: SLUDGE MATERIAL ON BEAMS NEAR PRESSES, SAMPLE STATION A - 07.
FRAME NUMBER: 15 **DATE:** 05/11/95 **TIME:** 1437 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

TOP

SCENE: TRASH BAGS FULL OF SUSPECTED ACM.
FRAME NUMBER: 17 **DATE:** 05/03/95 **TIME:** 1100 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

SCENE: TRASH BAGS OF SUSPECTED ACM.
FRAME NUMBER: 17 **DATE:** 05/11/95 **TIME:** 1438 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: TRASH BAG OF SUSPECTED ACM, SAMPLE STATION A - 06.
FRAME NUMBER: 16 **DATE:** 05/11/95 **TIME:** 1438 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

SCENE: OIL ON FLOOR IN BOILER ROOM, SAMPLE STATION F - 01.
FRAME NUMBER: 5 **DATE:** 05/11/95 **TIME:** 1426 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: DEBRIS IN BOILER ROOM AREA, SAMPLE STATION A - 02.
FRAME NUMBER: 6 **DATE:** 05/11/95 **TIME:** 1426 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

SCENE: IMPREGNATING MATERIAL ON FLOOR, SAMPLE STATION F - 02.
FRAME NUMBER: 11 **DATE:** 05/11/95 **TIME:** 1431 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: IMPREGNATING VESSEL, SAMPLE STATION A - 05.
FRAME NUMBER: 12 **DATE:** 05/11/95 **TIME:** 1433 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

SCENE: INSULATING MATERIAL ON TOP OF IMPREGNATING OVEN.
FRAME NUMBER: 9 **DATE:** 05/11/95 **TIME:** 1430 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: INSULATING MATERIAL ON TOP OF IMPREGNATING OVEN.
FRAME NUMBER: 10 **DATE:** 05/11/95 **TIME:** 1430 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

SCENE: INSULATING MATERIAL ON TOP OF IMPREGNATING OVEN, STATION A - 04.
FRAME NUMBER: 8 **DATE:** 05/11/95 **TIME:** 1428 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: DUST ON FLOOR, SAMPLE STATION A - 03.
FRAME NUMBER: 7 **DATE:** 05/11/95 **TIME:** 1427 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

SCENE: ABANDONED AUTOMOBILE LOCATED INSIDE 40 BRIDGE STREET.
FRAME NUMBER: 20 **DATE:** 05/03/95 **TIME:** 1105 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: ABANDONED AUTOMOBILE LOCATED INSIDE 40 BRIDGE STREET.
FRAME NUMBER: 21 **DATE:** 05/03/95 **TIME:** 1105 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

SCENE: BASEMENT AREA, SAMPLE STATION A - 10
FRAME NUMBER: 19 **DATE:** 05/11/95 **TIME:** 1441 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: SUSPECTED ACM CONTAINING SLUDGE LOCATED IN BASEMENT OF 40 BRIDGE STREET.
FRAME NUMBER: 19 **DATE:** 05/03/95 **TIME:** 1100 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

SCENE: SLUDGE MATERIAL ON WALLS IN BASEMENT. SAMPLE STATION A - 10
FRAME NUMBER: 18 **DATE:** 05/11/95 **TIME:** 1440 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: DUST BAGHOUSE STRUCTURES ON ROOF OF 40 BRIDGE STREET.
FRAME NUMBER: 21 **DATE:** 05/03/95 **TIME:** 1115 **SKY CONDITION:** SUNNY
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

SCENE: VIEW OF ROOF OF 40 BRIDGE STREET.
FRAME NUMBER: 22 **DATE:** 05/03/95 **TIME:** 1115 **SKY CONDITION:** SUNNY
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: TOP OF BAGHOUSE STRUCTURE AT 40 BRIDGE STREET.
FRAME NUMBER: 23 **DATE:** 05/03/95 **TIME:** 1120 **SKY CONDITION:** SUNNY
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

SCENE: TOP OF BAGHOUSE STRUCTURE AT 40 BRIDGE STREET.
FRAME NUMBER: 24 **DATE:** 05/03/95 **TIME:** 1120 **SKY CONDITION:** SUNNY
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: ENTRANCE TO 10 SANDERS STREET, SAMPLE STATION A-21.
FRAME NUMBER: 26 **DATE:** 05/11/95 **TIME:** 1523 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

SCENE: FLOOR AREA LOCATED INSIDE 10 SANDERS STREET, SAMPLE STATION A-21.
FRAME NUMBER: 27 **DATE:** 05/11/95 **TIME:** 1524 **SKY CONDITION:** INDOORS
PHOTO BY: S. AMIRAULT **WITNESS(ES):** E. COFFEY
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 0109

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: CAPACITOR LOCATED IN 10 SANDERS STREET BUILDING.
FRAME NUMBER: 3 **DATE:** 05/03/95 **TIME:** 1015 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

SCENE: CAPACITORS LOCATED INSIDE 10 SANDERS STREET BUILDING.
FRAME NUMBER: 4 **DATE:** 05/03/95 **TIME:** 1015 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

TOP

SCENE: CAPACITORS LOCATED INSIDE 10 SANDERS STREET BUILDING.
FRAME NUMBER: 5 **DATE:** 05/03/95 **TIME:** 1015 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

TOP

SCENE: CAPACITORS LOCATED INSIDE 10 SANDERS STREET BUILDING.
FRAME NUMBER: 6 **DATE:** 05/03/95 **TIME:** 1015 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

PHOTOGRAPHY LOG SHEET
JOHNS MANVILLE COMPANY • NASHUA, NEW HAMPSHIRE

SCENE: CAPACITORS LOCATED INSIDE 10 SANDERS STREET BUILDING.
FRAME NUMBER: 7 **DATE:** 05/03/95 **TIME:** 1015 **SKY CONDITION:** INDOORS
PHOTO BY: P. GROULX **WITNESS(ES):** S. AMIRAULT
CAMERA: OLYMPUS **SETTING:** AUTO **FILM TYPE:** 100 ASA **FILM ROLL:** 16843

WESTON MANAGERS DESIGNERS/CONSULTANTS
99 South Bedford St
Suite 5
Burlington, MA 01803
Phone: 617-229-6430
Fax: 617-272-3619

NEGATIVES

FILM ROLL 0109

FILM ROLL 16843